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Towns

DEGREE FOR WHICH THESIS WAS PRESENTED Doctor of Philosophy

YEAR THIS DEGREE GRANTED Fall 1982

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Information Search and the Decision to Move: A Sociogenic Profile of Migrants to Four
Alberta Single Resource Industry Towns



by

Richard J. Haigh

A THESIS

SUBMITTED TO THE FACULTY OF GRADUATE STUDIES AND RESEARCH
IN PARTIAL FULFILMENT OF THE REQUIREMENTS FOR THE DEGREE
OF Doctor of Philosophy
IN
Rural Sociology

Department of Rural Economy

EDMONTON, ALBERTA

Fall 1982

625-260

THE UNIVERSITY OF ALBERTA
FACULTY OF GRADUATE STUDIES AND RESEARCH

The undersigned certify that they have read, and recommend to the Faculty of Graduate Studies and Research, for acceptance, a thesis entitled Information Search and the Decision to Move: A Sociogenic Profile of Migrants to Four Alberta Single Resource Industry Towns submitted by Richard J. Haigh in partial fulfilment of the requirements for the degree of Doctor of Philosophy.

Abstract

The major purpose of this thesis was to examine the information search behavior of migrants to four single resource industry communities (SRICs) in Alberta. Data yielded by the survey methodology also provided a social, demographic, and attitudinal profile of the migrants themselves. The concept of migration-related information search was guided by role theory and the reference group perspective. It was hypothesized that migrants would adopt idiosyncratic patterns of information search behavior on the basis of occupational skill levels and destination characteristics. Information sources were viewed in terms of 'reference others', whose role and influence varied across several social and economic dimensions. A test battery, utilizing the SPSS sub program 'Discriminant Analysis' to quantify levels of association, supported the core hypothesis while at the same time revealing additional information about the nature of the relationships involved. The secondary hypothesis that patterns of information search would vary on the basis of an SRIC's stage of development was also supported. Unskilled and semi skilled migrants were much less likely than their more highly skilled counterparts to have obtained jobs prior to moving, and their information search patterns were less job-specific. Unlike the more highly skilled, who mostly used employment networks or mass media to obtain jobs at destination, the less skilled relied heavily upon migrant stocks, i.e., friends and relatives at destination. As hypothesized, migrants to 'newer' SRICs utilized migrant stocks to a lesser extent than those to longer established communities. However, contrary to expectations levels of post decision satisfaction were not significantly related to occupational skill levels. Rather, such attributes as the respondent's age and marital status largely accounted for the small proportion of explained variation.

Migrants sampled in this thesis did not totally reflect the popular stereotype of SRIC populations. This may derive in part from a deliberate strategy of selecting communities that had reached a post start-up phase of their evolution at the time of sampling. Moreover, unlike many SRICs in Canada's far north, most in Alberta have been viewed as long term settlements. Both of these factors undoubtedly encourage a more permanent workforce. Migrants were asked to indicate levels of satisfaction with issues ranging from their decision to move, to specific aspects of the work and community

environments. They were also questioned about the nature and extent of influence exercised by spouses, other relatives, and friends and neighbors. A battery of questions quantified the importance that migrants attached to the workplace. Migrants were asked to identify features most liked and disliked about their respective communities, and their major reason for moving. Of the many predictor variables introduced into causal models the most useful were found to be occupational skill levels, marital status, age of respondent, and cultural background. Length of residence in the community was found to account for very little explained variation among respondents. Overall, the more highly skilled migrants, particularly those who were married (and therefore older), showed higher levels of morale and satisfaction with both job and community than the less skilled, single migrants. However, while satisfaction with the work environment tended to be generally high among nearly all the respondents, there was widespread dissatisfaction with social and physical community infrastructures.

Acknowledgement

I was fortunate to have a patient and understanding supervisor during the process of writing this thesis; my sincere thanks to Dr. D. S. Gill for his help and encouragement. A note of thanks is also due to the other members of my supervisory committee, namely, Dr. C.W. Hobart (sociology), Dr. R.G. Ironside (geography), and Dr. T.W. Petersen (rural economy) for their comments on earlier drafts of the thesis.

In addition I must acknowledge a debt of gratitude to Clare Shier for his assistance in the statistical analyses and particularly to Jim Copeland, who spent many thankless hours organizing the thesis on Textform. Judy Warren, our data entry operator, also invested a considerable amount of time and expertise in making sense of my copy. Without these people I might still be trying to get my thesis completed.

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I. THE SINGLE RESOURCE INDUSTRY COMMUNITY IN CANADA

The political and economic realities of North American settlement have encouraged both geographic and social mobility among its non-indigenous populations. Canada's emergence as a sovereign state has been due in large part to its vast wealth in natural resources. Indeed, this country continues to base an overwhelming proportion of its economic activity upon the extraction and export of raw materials. From the standpoint of those classed as non-renewable, Canada stands on one of the world's last frontiers.

More than most industrialized nations, Canada boasts a legacy of 'company town' development. Whenever natural resources have been identified and deemed marketable, communities have sprung up in the vicinity to shelter the accompanying workforce. Legions of skilled and unskilled, young and not so young, have followed the roller coaster fortunes of the forest products industry, coal mining, the search for oil and natural gas, and the extraction of a host of minerals ranging from the exotic to the mundane. These are the communities around which legends have been built. Prior to the Second World War, many sprang up almost overnight; and when the resource failed or became depleted, died as abruptly. Every province in Canada has its ghost towns, most of them silently underscoring an inherent vulnerability of single economies to the caprice of supply and demand.

Single resource industry communities (SRICs) have, not surprisingly, become stereotyped in the public mind as geographically remote places, devoid of permanence and sadly lacking a sense of identity, as places of refuge for the drifter, the free-spirited, and the ne'er-do-well. Perhaps more importantly, SRICs, together with all their attendant problems, have been largely accepted with philosophical resignation. Canada's early single resource industry communities were nothing more than a by-product of resource exploitation. Corporate decision-makers correctly perceived that most of these resources were finite, if they ever proved to be economically viable, and scant consideration was given to spending money on a social and physical infrastructure which might suddenly find itself without an economic base. Some of these shanty towns still house a viable workforce, but many more live on only as tourist attractions or as sepia prints among the pages of history books.

While most SRICs in Canada are located in rural areas, and therefore tend to be geographically remote from urban centers, a recent paper by John Bradbury¹ argues that, economically, they are closely integrated with the urban industrial complex. The paper, based on Bradbury's doctoral study of SRICs in British Columbia, suggests that these communities should be viewed as integral parts of a global system of resource extraction. The existence and location of SRICs is increasingly dependent upon world demand for raw materials and for increased levels of capital accumulation by multinational corporations. According to Bradbury, the relationship between the power base and SRICs has been, and continues to be, uneven with the latter always subordinate.

Carl Dawson and Eva Younge,² and S.D. Clark³ were among the first to document the social fabric of Canada's SRICs. All were acutely aware of the problems arising from economic uncertainty, impermanence, and geographic isolation. Since then, advances in technology and widening world demand have greatly expanded the range of natural, particularly finite, resources being extracted in this country. At the same time, these trends, along with increased public awareness, have brought the plight of SRICs under closer scrutiny. The accelerated concern for regional equity which began during the 1950s and which was largely a reflection of Canada's evolving bureaucratic structure, led to greater government involvement in economic planning. Natural resource deposits became viewed as the nuclei of potential growth poles. It was quickly perceived that royalties and licenses derived from resource extraction could contribute significantly to treasury coffers. While the literature suggests a degree of collaboration between the federal and provincial governments and the private sector since the turn of the century,⁴ such collaboration has expanded dramatically during the past two decades. As Bradbury notes, governments have legitimized modes of production and encouraged the flow of capital and migrants into specific areas where resource extraction is planned.

More recently, government involvement has included the provision of an industrial infrastructure, specifically access roads, serviced land for residential subdivision, and

¹John H. Bradbury, "Towards an alternative theory of resource-based town development in Canada," *Economic Geography* 55 (1979) pp. 147-170.

²Carl Dawson and Eva Younge, *Pioneering in the Prairie Provinces*. (Toronto; Macmillan and Company, 1940).

³S.D. Clark, *The Developing Canadian Community*. (Toronto: University of Toronto Press, 1942).

⁴See, for example, M.H. Watkins, "Resources and Underdevelopment," in *The Political Economy of Dependency*, ed. R.M Laxer (Toronto: McClelland and Stewart, 1973.)

utilities services. At the same time, developers have found themselves obliged, or at least encouraged, to assist in providing social and physical facilities for the local workforce. Most importantly, federal and provincial strategies for creating jobs in economically depressed rural areas are now oriented toward fostering permanent, rather than transitional, settlements. Particular emphasis is placed on developing long range strategies that promise a viable future for the community after the primary resource becomes depleted. Provision of modern schools, libraries, health and recreation facilities in these communities reflect this new philosophy.

Defining the SRIC: Notwithstanding these changes, the stereotyped image of Canada's SRICs persists, and so do many of their social and economic problems. Moreover, the situation is hardly improved by a persistent vagueness in both description and definition. It is not uncommon to see the prefix 'frontier' attached to these communities, despite the fact that they may fail to qualify in either a geographic or technological sense. The problem has been further compounded by some considerable vagueness over the nature of the resource involved. Rex Lucas,¹ in his acclaimed sociological dissection of Canada's SRICs, can be found referring to 'communities of single industry,' regardless of whether they are based upon primary resource extraction or manufacturing. The distinction is important because manufacturing implies a greater degree of physical permanence in terms of an economic base than the extraction of a finite resource. J.A. Riffel² has perhaps come closest to a parsimonious definition in declaring SRICs as:

'Population centers in which the economic activity of the residents is dependent upon the extraction and primary processing of a natural resource, dependency being measured in either employment or export base terms. The concept includes mining towns, towns based on the forestry industry, and towns serving hydroelectric facilities. It does not include administrative, port, defense and communications towns.'

A key criterion of Riffel's definition lies in the extraction and possibly the primary processing of a natural resource, either finite or renewable; and he is quite correct in including the generating of electrical power in his terms of reference. Consequently, despite several 'gray' areas, such as fishing and certain forms of agriculture, Riffel's

¹Rex A. Lucas, *Minetown, Milltown, Railtown*. (Toronto: University of Toronto Press, 1971).

²J.A. Riffel, *Quality of Life in Resource Towns*. (Ottawa: Ministry of State for Urban Affairs, 1975).

definition will be used to guide this study.

The Problematic Aspects of SRICs

Even today there seem to be few aspects of natural resource extraction and the simultaneous phenomenon of the single resource industry community that are not deemed problematic. Developers, governments, and other informed observers continue to identify a broad array of economic, social, and psychological aberrations among people who live and work in Canada's SRICs. Collectively, these symptoms surface as a social malaise that envelopes the entire community. Marital breakdown, juvenile delinquency, alcoholism, and alienation share common ground with depressingly low levels of community satisfaction.¹

Prior to the Second World War period, public indifference to the problems faced by Canadian SRICs was matched by an attitude that, given time, these blots on the landscape would go away. The fact is that single resource industry communities are not disappearing. On the contrary, they are sprouting in ever increasing numbers, although it is worth noting that not all are 'new' settlements. Many in fact, are small service/trade centers that formerly served (and often still do) the area's farm population. Much of this trend can be attributed to the accelerated search for new deposits of oil and natural gas, a renaissance in the Canadian coal industry, and continued expansion in World demand for minerals. And although advances in communication technology appear to have done little to ease the endemic problems of SRICs, they have done a good deal to bring these problems to public attention. As a result the past two decades have witnessed a steady flow of research from universities and government agencies. Particularly noteworthy are the contributions made by the University of Manitoba's now defunct Center for Settlement Studies.

Emphasis of Existing Research: However, most of this work has dealt with economic or quality-of-life issues. Examples include Joseph and Judith Davenport's study of boom

¹See, for example, J.J. Honigmann, "Social disintegration in five northern Canadian communities," *Canadian Review of Sociology and Anthropology* 2 (1965), pp. 199-214; J.A. MacMillan, et. al., *Determinants of Job Satisfaction in Northern Mining Towns*. Winnipeg: Center for Settlement Studies, University of Manitoba, 1974; J.A. MacMillan, et. al., *Determinants of Labour Turnover in Canadian Mining Communities*. Winnipeg: Center for Settlement Studies, University of Manitoba, 1974.

towns in the U.S. mountain states,¹ and a broader treatment of these issues by J.A. Riffel.² Perhaps most significant is the fact that these studies have tended to take the community as their analytical datum. While the value of community studies should not be underestimated, they do suffer from an inherent handicap of viewing social systems as existing in something of a vacuum. This is clearly unrealistic; the protean material of human settlements is people, and people do not exist in isolation. The life cycle can be viewed as a continuous web of both spatial and temporal linkages: kinship ties, patterns of employment, and places left behind, to name just a few. The social psychology of life satisfaction cannot be meaningfully explored solely in the context of a single point in time and space.

One of the most salient features of Canadian SRICs can be found in the composition of their populations. No single resource industry community has come into being purely on the strength of an indigenous work force. Several factors account for this. To begin with, the exploitation of natural resources usually demands labor inputs in quality and quantity that are unobtainable in the immediate locality, particularly during construction of the physical plant. Even though many SRICs in Canada are not nearly so geographically isolated as the popular stereotype suggests, many of these regions are sparsely populated, with agriculture or hunting and trapping (or both) providing the economic base. Secondly, in order to attract workers developers are obliged to offer wage rates that are higher than average, and invariably higher than those prevailing in the region. Thirdly, as Bradbury has noted, most extractive industries are owned by multinational corporations. Notwithstanding the rhetoric which normally accompanies bids for exploration approval, these firms are not overly interested in local socioeconomic concerns. Moreover they can, and often prefer to, draw upon their own extensive labor pools in order to fill specialized task categories. This, in fact, has been a major point of contention with those who despair over the substantial income leakages from regional economies dependent upon extractive industries.

Thus, in-migration becomes a key element in the experience of a single resource industry community. But while researchers readily acknowledge the implications of

¹Joseph and Judith Davenport, *The Boom Town: Problems and Promises in the Energy Vortex*. Laramie, Wyoming: University of Wyoming, 1980.

²J.A. Riffel, *Op. cit*

migration for community relations, very little attention has been paid to the migrants themselves. Some significant exceptions are John Matthiasson and James Kerri's examination of the mobility patterns among residents of Fort McMurray, Alberta;¹ the Ontario Ministry of Labor's recent study of labor turnover among selected industries in northwestern Ontario;² and a report on migration to northern Canadian mining communities by J.E. Winston Jackson.³ However, all show a preoccupation with the manner in which migration interacts with the environment, particularly at destination.

Migration and Manpower Mobility

Migration is simultaneously an inherent feature and a problem of Canadian SRICs. A large proportion of both the start-up and ongoing workforce migrates in from outside the immediate locality; unfortunately, it appears to migrate out with similar frequency. Indeed, researchers have likened these communities to a revolving door, with a perpetual stream of workers moving in to take the place of those who have left. High rates of in and out-migration have been blamed for the myriad social, psychological, and economic problems experienced by residents, and for low levels of community satisfaction. For their part, employers tend to attribute these symptoms to the attitudes of in-migrants, whom they feel often place economic gain above all other considerations.

The economic costs of extensive in and out-migration to and from SRICs cannot be ignored, and they are particularly salient to developers. Employers are profoundly affected by manpower instability. In addition to spending considerable sums of money on hiring and re-training replacement workers, they frequently find these disruptions contributing to production delays. Spokesmen for the industry agree that, with the possible exception of taxation issues, manpower turnover is the greatest single obstacle to the expansion of natural resource development in Canada.⁴ But while the general aspects of internal migration are, for the most part, fairly well understood, the idiosyncrasies of migration to and from Canadian SRICs have received much less

¹John S. Matthiasson and James N. Kerri, *Two Studies on Fort McMurray*. Winnipeg: Center for Settlement Studies, University of Manitoba, 1971.

²Ontario Ministry of Labor. *Northwestern Ontario Manpower Adjustment Study*. Toronto: Ministry of Labor, 1978.

³J.E. Winston Jackson, *Migration to Northern Mining Communities: Structural and Social-psychological Dimensions*. Winnipeg: Center for Settlement Studies, University of Manitoba, 1971.

⁴See J.A. Riffel, op. cit.

empirical attention. In fact, sociological interest in the entire phenomenon of natural resource development on the North American continent seems to have waned since the early 1970s. The existing literature indicates that migrants to these communities are younger than those who migrate to large urban centers. Males also exceed females, especially during the early stages of physical plant construction. And while socioeconomic status of the working community shows a marked trend/swing/tendency towards homogeneity,¹ racial and ethnic compositions are more mixed. These and other related findings suggest a labor force in a constant state of flux, with workers constantly relocating in order to take advantage of better jobs and higher wages. The highly mobile workforce is well documented, but do these migrants have a history of repeated migration? Surprisingly there is little evidence to support this stereotype.

The empirical literature dealing with impelled migration confirms that people move largely for economic reasons, usually jobs and wages. However, an understanding of 'why' people migrate does not necessarily inform the question of how they go about it. At the core of this conceptual distinction lies a decision-making process undertaken by every prospective migrant. It underlies all migration, regardless of motives or destination. The position taken here is that much of the internal migration literature is clouded by a failure to conceptually and analytically distinguish between motivating factors and the mechanisms of decision-making behavior. Thus, to argue for economic motivation does not compromise the process by which prospective migrants become aware of employment opportunities and seek out information relevant to a possible move. Migration may be viewed as a collective phenomenon but information search and the decision to migrate are uniquely individual and can only be understood from this perspective.

A. Objectives of the Study

There is general agreement in the literature that economic motivation, in the form of jobs and wages, is a feature common to all forms of impelled migration, regardless of origin or destination. Consequently, the ability of theoretical perspectives based on these

¹Bradbury, among others, has noted that class and rank become highly defined in SRICs. However, these divisions usually take the form of a large blue-collar (and semi skilled white-collar) proletariat and a proportionately smaller middle class elite.

factors to inform predictive models of migration to Canada's SRICs would appear to be rather limited. Such a conclusion suggests that an understanding of 'why' people migrate may be less important to the researcher than understanding the social-psychological mechanisms by which they arrive at a decision. Consequently, the primary objective of this study is to study the process of migration, within the context of 'information search', to four Alberta communities of this type. The study design is sensitive to two possible patterns of information search behavior: 1. Behavior based upon the socioeconomic characteristics of the migrants; 2. Behavior related to destination characteristics.

Idiosyncratic search patterns, at least to the extent they are related to job search, have been identified among migrants by several researchers. However, internal migration and information search behavior have not heretofore been conceptually linked by role and reference group theory. An attempt will be made to show that they are fruitful perspectives from which to view these processes. The theoretical models developed to test a series of interrelated hypotheses derive from this body of theory. It is also possible that destination characteristics, particularly a community's temporal stage of development, indirectly influence search patterns by mediating the presence of certain information sources utilized by migrants.

Unlike much of the existing empirical literature dealing with Canadian SRICs, this is not a community study. While the frame of analysis is the Canadian single resource industry community the focus of attention here will be upon the migrant to these communities. Therefore the study will incorporate a strong descriptive element in support of its inferential bases. Of major concern will be the social and demographic characteristics of the migrant, such as sex, age, marital status, education and occupational composition, prior migration experience, place of origin, length of residence in the community and kinship networks. Migrants will also be questioned about their attitudes toward the employer, the job, fellow workers and community life.

B. Scope and Organization of the Study

The empirical dimension of this study is based upon a sample of recent migrants to four single resource industry communities in north western Alberta. The communities in question,: Fox Creek, Grande Cache, Rainbow Lake, and Swan Hills, were selected largely

on the basis of community age. This was done in order to facilitate testing of hypotheses relating to the possible association between their stage of development and specific information gathering processes of migrants. These communities can be loosely ranked in terms of population take-off. Data were gathered by means of self-administered questionnaires and by means of interviews with key informants. Sampling was carried out during the summer of 1981. An important component of the survey questionnaire was the Migrant's Reference Other Test (MIRO) battery, designed to identify and weight the migrant's sources of information relevant to his/her move.

The study is organized into eight chapters, followed by appendices and a bibliography. Chapter One presents an overview of single resource industry development in Canada, identification of the problem, and a statement of objectives. Chapter Two reviews the literature dealing with internal migration, with particular reference to the North American experience. The purpose of this chapter is to illustrate how the economic determinism of classical and neo classical migration theory has gradually given ground to an emerging concern with the social-psychological factors inherent in decisions to migrate. Special attention is given to behavioral perspectives, including the Gestalt approach to place perception. It will be argued that Gestaltism suffers from several logical deficiencies insofar as the decision to migrate is concerned. Instead, empirical emphasis will be placed upon the concept of 'information search' within a theoretical framework of role-taking and reference group behavior.

Chapter Three develops an argument in support of the role and reference group perspectives. It is pointed out that these perspectives accommodate the socializing dimension of information search, while at the same time informing the mechanisms by which the salience of information sources becomes discriminated. Reference group theory provides a conceptual framework for categorizing salient sources of information. Chapter Four develops these sources into three reference other typologies of job search behavior. At this stage the objectives outlined in Chapter One will be operationalized into a series of hypotheses, using the Migrant's Reference Other Test battery for empirical instrumentation. Chapter Five discusses methodological issues relating to the survey instrument and provides a more detailed explication of the MIRO test battery. Statistical strategies are outlined together with a rationale of the sampling

frame and sampling procedures. Chapter Six deals with the descriptive data while Chapter Seven tests the hypotheses developed in Chapter Four. Chapter Eight provides a broad summary of the study's purpose and findings, concluding with suggested implications for future SRIC development policy.

II. INTERNAL MIGRATION: PAST AND CURRENT PERSPECTIVES

Human migration is now one of the most widely investigated phenomena among the social sciences. The movement of people in time and space has been documented since man began keeping records and today constitutes a strategic variable in economic planning, social change, and political organization.¹ However, prior to the nineteenth century migration was commonly viewed as an ad hoc response to political and economic pressures; a more-or-less haphazard movement of the disadvantaged from place to place throughout the globe. Well into the twentieth century Pitirim Sorokin, Carl Zimmerman, and Charles Galpin were still contending that rural to urban migration was, in the main, a chance selection.² Around the same period Robert Park³ can be found referring to migrants as 'marginal men.' These perceptions are hardly surprising considering the perspective from which migration was viewed. In Britain and north east Europe large scale and sustained movement of people did not become a significant phenomenon until the onset of the Industrial Revolution. Coinciding with drastic changes in agricultural production in Britain particularly, the shift of manufacturing from cottage industry to urban located factories created massive dislocations in population distributions. By far the most salient aspects of labor re-allocations such as these were the social and economic costs to migrants. Karl Marx is foremost among scholars of the period who read profound implications into the misery and oppression suffered by those forced to sell their labor in a buyer's market.

In North America populations have historically been more geographically mobile than those in Europe. The settlement of the United States and Canada has been a process of westward migration. In the United States the Civil War added momentum and new directions to the migratory flows. Again, these population redistributions, particularly those created by the Civil War, were seen in terms of poverty, crime, and urban sprawl. However, observers of this period were quick to identify two important characteristics of migration. The first was the fundamental distinction between 'compelled' and 'impelled' migration. Unlike those who are physically forced to move by decree of one authority or

¹See J.A. Jackson, ed., *Migration* (Cambridge: Cambridge University Press, 1969), Chap. 1.

²Pitirim Sorokin, Carl C. Zimmerman, and Charles J. Galpin, *A Systematic Source Book in Rural Sociology* (Minneapolis, Minn.: The University of Minnesota Press, 1932).

³Robert E. Park, "Human migration and the marginal man," *American Journal of Sociology* 33 (1928), pp. 881-893.

other, impelled migrants base their decision to move on economic or social factors— or both. While the literature suggests that impelled migrants often have little choice under the circumstances, they nevertheless move of their own volition. The second prominent characteristic of migration is a persistent flow of migrants from rural to urban areas and more recently urban to urban flows. The history of man, it appears, is one of progressive urbanization.

Defining Migration: Migration has been defined as 'a permanent or semipermanent change of residence'.¹ Such definitions usually make no assumptions about volition, motivation, or whether the migratory act takes place from outside or within specific territorial boundaries. Not included in the definition are the continual and seasonal movements of such disparate groups as central Asian Kazaks and American fruit pickers. Oddly, while the concept of 'distance' has become highly important to latter day researchers it apparently has no utility as a criterion. Thus, as one writer notes, a move across the hall from one apartment to another is theoretically no less an act of migration than moving from Bombay, India, to Cedar Rapids, Iowa. This does nothing to aid the definition. For most practical purposes, however, 'migration' is considered to involve at the minimum a permanent or semipermanent move from one community to another, regardless of how geographically separated they are. The question of what constitutes a 'semipermanent' move has not been satisfactorily resolved either. Much of this issue seems to revolve around the 'intent' of the individual, rather than the actualized duration. In other words, if an individual moves from place 'A' to place 'B' with the intention of making the latter his permanent home, this constitutes migration even though he may become homesick and return to place 'A' a few weeks or months later. This problem has a good deal of relevance for migration to single resource industry communities, since it is not unusual for people to obtain jobs there for the sole purpose of making quick money and then returning to point of origin. Though an individual may live in such a community for two years while saving enough money to return home, does this length of stay qualify him as a migrant? No attempt will be made to untangle this issue here, since there appears to be no solution short of some arbitrary rule. This study concerns the

¹Everett S. Lee, "A theory of migration," *Demography* 3 (1966) pp. 47–57.

migration of people to single resource industry communities, and the ex-post facto data gathering methodology utilized provides little alternative to accepting non-indigenous respondents as *prima facie* evidence of migration.

A. Classical Migration Theory

As students of migration are aware, it was a remark by the British scientist William Farr to the effect that this phenomenon appeared to persist without any definable law which prompted Ernest Ravenstein, a British mathematician, to formulate his 'laws' of migration. These laws, which he attempted to validate with data from more than twenty countries, include the assertion that migrants tend to travel short distances and are motivated primarily by economic/employment incentives. He also claimed that large industrial cities induce long distance migration, presumably due to their greater attractive power; that rural people are less migratory than urban dwellers; that females are more migratory than males; that migration increases concomitantly with technology and industrialization; and that every migration current generates a weaker counter current. Ravenstein presented his theories to the Royal Statistical Society on 17 March, 1885, and promptly sparked a controversy that continues to this day. The problem was, and still is, that there is a fundamental distinction between 'measuring' migration and 'understanding' it. This problem, according to Julius Margolis,¹ has been exacerbated by an absence of clarity over what is being measured. Only when some understanding of a phenomenon emerges does prediction become possible.

Classical migration theory was, and remains, firmly rooted in economic determinism. It is built around the core assumption that population redistributions are a product of regional economic imbalances, specifically those of wages. Thus, impelled migration has been seen as a mechanism of adjustment, directing the spatial economy towards a state of equilibrium. One of the first to formally expound these functionalist notions in any systematic detail was J.R. Hicks,² who expressed the prevailing view in a work succinctly entitled '*A Theory of Wages*'. Subsequently a large body of literature

¹Julius Margolis, "Internal Migration: Measurement and Models," in *Internal Migration: A Comparative Perspective*, eds. Alan A. Brown and Egon Neuberger (New York: Academic Press, 1977).

²J.R. Hicks, *A Theory of Wages* (London: Macmillan Company, 1932).

emerged which examined relationships between economic growth and migration, and the manner in which supply and demand are brought together in the labor market. As Patricia Gober-Meyers¹ notes, this perspective underwent drastic revision during the 1950s when migration researchers began to view the movement of people as a *cause* of economic change as well as a reaction to it. Perhaps the most important aspect of this change in direction is that it recognized the selective nature of migration. Contrary to being an equilibrating mechanism, selective migration, particularly among the younger and better skilled, came to be seen as creating imbalances from resulting regional income inequalities.

Models of Internal Migration: Prior to 1960 models of internal migration were predicated upon determining factors. Basic 'gravity' types proposed that migration is directly related to the size of destination options and point of origin, and inversely related to distance. George Zipf's P_1P_2/D hypothesis, developed in 1942, is typical of this genre.² It predicted an inverse relationship between the rate of in-migration to a central point from other points and the distance between those points. Conversely, the rate of out-migration from a central point to other points lying at a distance will also vary inversely with distance. Moreover, Zipf noted a proportional relationship in the amount of interchange between any two areas and the product of the population of the two areas, and an inversely proportional relationship in the distance between them.

Most of these models have been built upon gross migration, in other words, unidirectional flows of population. However, the recognition of selectivity immediately brought the *consequences* of migration under scrutiny, which in turn gave rise to the concept of 'push' and 'pull' factors. While researchers have often treated the two elements as discrete entities, they are, rather like the two sides of a coin, difficult to analytically separate. Nevertheless, several interesting findings have emerged from this conceptual dichotomy. For example, it is now known that prospective migrants are more influenced by labor demand at destination than labor over-supply at point of origin. Once

¹Patricia Gober-Meyers, "Employment-motivated migration and economic growth in post-industrial market economies," *Progress in Human Geography* 2 (1978), pp. 207-229.

²George K. Zipf, "The P_1P_2/D hypothesis: on the intercity movement of persons," *American Sociological Review* 11 (1946), pp. 677-686.

again this type of research suggests a decision-making process distinctly more multi-faceted than a purely economic cost-benefit calculation. Recognizing this limitation, Samuel Stouffer¹ introduced the notion of 'intervening opportunities,' and considering the profundity of his work it is surprising he received so little attention at the time. Stouffer suggested that the volume of migrants over a given distance is directly proportional to the percentage increase in opportunities at that distance. More importantly, he saw no necessary relationship between mobility and distance. Instead, he proposed that the number of migrants moving a given distance is directly proportional to the number of opportunities at destination and inversely proportional to the number of intervening opportunities. But despite Stouffer's theories, and others of the period, classical and neo classical models of labor mobility have been primarily concerned with migration as a 'reaction' to economic change rather than a generator of it.²

Nevertheless, a preoccupation with migration streams persists. Samir Maamary³ lists twelve propositions offered by a number of prominent social scientists:

1. The rate of in-migration to a central point from each of several other points lying at a distance tends to vary inversely with the distance (G.K. Zipf's hypothesis).
2. The rate of out-migration from a central point to each of several other central points lying at a distance tends to vary inversely with the distance (Zipf's hypothesis).
3. The amount of interchange between any two areas is directly proportional to the product of the population of the two areas and inversely proportional to the distance between them (Zipf's hypothesis).
4. Rates of net migration between two areas tend to be directly proportional to differences in level of living and inversely proportional to the distance between them (Donald Bogue's hypothesis).
5. If two areas are in different economic regions, the relationship between distance and number of migrants may be different from the relationship within an economically integrated area (J. Folger's hypothesis).

¹Samuel A. Stouffer, "Intervening opportunities: a theory relating mobility and distance," *American Sociological Review* 5 (1940) pp. 845-67.

²Patricia Gober-Meyers, op. cit., p. 225.

³Samir N. Maamary, Attitudes Toward Migration Among Rural Residents: Stages and Factors Involved in the Decision to Migrate. Published Ph.D. Dissertation, University of Kentucky, 1976. pp. 9-10.

6. The number of persons going a given distance is directly proportional to the number of opportunities at that distance and inversely proportional to the number of intervening opportunities (Samuel Stouffer's hypothesis).
7. The rate of migration between two communities varies with the type of community of origin and destination, the direction of migration, and the age and other characteristics of the migrant (Bogue's hypothesis).
8. The rate of in-migration and out-migration in any community tend not to be independent of each other. A high rate of in-migration tends to be accompanied by a high rate of out-migration (Bogue's hypothesis).
9. A very high proportion of all migration streams is a flow between communities of the same type (urban to urban, farm to farm, etc.). In modern industrialized nations the urban to urban flow may be larger than all other flows combined (Bogue's hypothesis).
10. Migration streams tend to avoid areas of high unemployment and to flow with greatest velocity towards areas of low unemployment (Bogue's hypothesis).
11. The size, direction, and net effect of migration streams are not invariable, either in time or place. Instead, they are highly sensitive to the social and economic changes that are occurring in the various communities of origin and destination (Bogue's hypothesis).
12. The regional pattern of net migration tends to remain constant for several decades, presumably reflecting the continued action of a given set of redistributive forces (H.S. Shyrock and H.T. Eldridge's hypothesis).

Even though these twelve propositions reveal an awareness of social and cultural factors in the migration process, most classical and neo-classical models lean heavily upon aggregated data derived from the census and other government agencies. While yielding valuable information on interregional population flows, and while undoubtedly amenable to trend projections, macroanalysis on this scale has not, characteristically, been sufficiently sensitive to permit a more detailed examination of related behavioral factors. It has also, unfortunately, entrenched a head-counting inductivism upon which many researchers with a sociological bent have heaped scorn. The problem, essentially, is that these approaches lack any causal utility. It was a gradual recognition, largely created

by a broadening interest in human migration among academic disciplines, that the phenomenon is highly specified which opened the way for a more micro-level study of migration behavior. As Mangalam and Schwarzweller¹ note, some concomitants of this increased interest in behavioral research have been a diversification of the variables employed in empirical fact-finding, and shift in emphasis to a more deductive methodology in model building.

'This is especially true in studies on the selectivity of migration. In addition to such 'traditional' (i.e., demographically relevant) variables as age, sex, distance travelled, race or ethnic origin, education, occupation, income, and the like, recent studies reveal an expansion of interest in attitudes, aspirations, motivations, values, community identification, institutional influences, and other social and sociopsychological factors intrinsic to an adequate explanation of migration. Furthermore, in the attempt to explain the dynamics of migration and their linkages with population and social change, greater effort is being made to explore the complex interrelationships, for example, among sociological and demographic variables (long after Durkheim's suggestions for charting the morphological structure of society). Perhaps more importantly they subscribe to the utility of determining how values act upon the pre-existing attitudes of migrants.'

B. Behavioral Approaches to Migration

Joseph Berliner² writes, with more than an element of truth, that most people who study migration are not interested in migration at all. Rather, they are concerned about the 'manifestations' of migration; specifically, its consequences.

'Social psychologists study migration because they are interested in mental health, and migration appears to affect mental health. Anthropologists study migration because they are interested in culture, and migrants act as 'culture brokers' in the process of culture diffusion. Sociologists study migration because they are interested in all aspects of social relations, and migration affects virtually all aspects— from stratification and mobility patterns to the stability of such basic institutions as the family.'

Berliner is, of course, being rather misleading in limiting social psychology to issues of mental health, and just as much so in tying issues to simply the 'consequences' of migration. In fact, social psychological theory underlies several sociological models designed to inform the determinants of migration. Nevertheless, both sociological and

¹J.J. Mangalam and Harry K. Schwarzweller, "General theory in the study of migration: current needs and difficulties," *International Migration Review* 3 (1968), pp. 3-18.

²Joseph S. Berliner, "Internal Migration: A Comparative Disciplinary View," in *Internal Migration: A Comparative Perspective*, eds. Alan A. Brown and Egon Neuberger (New York: Academic Press, 1977).

anthropological models tend to be less rigorously specified than those developed by economists. More importantly, Berliner notes, they usually emphasize structure rather than process, and as a result show a marked static quality. Study of the migratory process as an element of change thus 'takes the form of comparative studies.'

Julian Wolpert¹ has explained behavioral approaches to impelled migration as a position that 'the origin and destination points (of migrants) take on significance only in the framework in which they are perceived by the active agents.' He is merely saying that such factors as obstacles to mobility and push-pull forces are manifestations of highly individualized decision-making processes. Inductivism, as previously noted, has a tendency to isolate 'effects,' while remaining insensitive to causal mechanisms. The term 'behavioral,' then, refers to one, several, or all of the temporal stages of the migration process, which may be summarized as follows:

1. *AWARENESS STAGE.* Actor becomes aware of economic and/or social opportunities at one or several geographic points.
2. *INFORMATION GATHERING STAGE.* Actor begins to gather information relevant to a possible move. This may include availability of jobs, accommodation, schooling for children, presence of friends or relatives, etc. Much of the process holds for those transferred by employer.
3. *DECISION-MAKING STAGE.* Based upon the completeness of information gathered, the actor will make a decision upon whether and where to migrate. Regardless of the source of stimuli, decisions tend to be derived from an evaluation of costs and benefits expected from moving, or refraining from such a move (lagged response).
4. *PHYSICAL MOVING STAGE.* Actor moves from point of origin to destination. In what is known as 'chain migration,' the preceding processes may re-commence without delay.
5. *EVALUATION STAGE.* The literature suggests that all migrants undertake a post migration evaluation in light of the actualized situation. Coincident with the temporal dimension of this process is the tendency for migrants to 'rationalize' their decision in instances where perceived costs and benefits of a further move

¹ Julian Wolpert, "Behavioral aspects of the decision to migrate," *Papers and Proceedings of the Regional Science Association* 15 (1965), pp. 159-169.

(or a return to point of origin) become reversed.

Several 'quasi behavioral' approaches to this process have been developed, mostly as an attempt to introduce some predictive utility into migration models. Thus, in addition to variables such as distance and economic opportunity, researchers now frequently introduce categories of age, education, occupation, race, and marital status. As Margolis has pointed out, these strategies are to a large extent a reflection of the need to know 'who' moves, as well as 'why.' Policymakers require such information to chart directions for education, housing, industry, and host of other societal considerations. In a study of labor mobility patterns in the southern United States, L.E. Gallaway found, for example, that the propensity to migrate decreased with age, largely because of perceived diminishing economic returns on the investment of relocating.¹ Gallaway also notes that 'security' and 'family ties' become more salient for older migrants. Adopting a different predictor, Aba Schwartz² found a systematic relationship between education levels and the propensity to migrate. Specifically, he found that within age groups the psychological frictions of distance decline noticeably with an increase in education levels. Indeed, the better educated appear on the whole to be much less deterred by the prospect of migrating than those with limited education. Looser family ties are one of several 'effects' of these education differentials cited by Schartz. J.K. Folger and C.B. Nam,³ in examining mobility and education patterns in the United States, came to the conclusion that the poorly educated also tend to be involved in much shorter distance moves than those with higher levels of education, a phenomenon, incidentally, supported by Schwartz.

'As education increases the market (for individual occupations at each level of education) tends to become geographically wider but quantitatively smaller. The market for dishwashers is local and many are needed; on the other hand, relatively few space scientists are needed, but the market is international. Thus, both the sophistication of the modes of information and the geographical size of the market increase with education—producing a higher homogeneity of information over the area and diminishing adverse effects of distance on allocative shares.'⁴

Thus, a prospective migrant who has little education and who has had few contacts with the larger society may be expected to perceive a move of 100 kilometers

¹L.E. Gallaway, "Age and labor mobility patterns," *Southern Economic Journal* 36 (1969), pp. 171–180.

²Aba Schwartz, "Interpreting the effect of distance on migration," *Journal of Political Economy* 18 (1973), pp. 1153–1169.

³J.K. Folger and C.B. Nam, *Education of the American Population*. Washington, D.C.: United States Bureau of the Census, 1960.

⁴ Aba Schwartz, op. cit., p. 1160.

with greater trepidation than a better educated individual faced with the prospect of moving ten times that distance. However, Schwartz and others have observed something of an 'S' curve in the performance of education as a predictor of psychic cost.

The Psychic Costs of Migration It was R.L. Burford¹ who first proposed the important conceptual distinction between 'psychological' and 'geographic' distance; and it is particularly germane for students of impelled migration among industrialized societies. Since frictions to spatial mobility in countries such as Canada, the United States, and Western Europe are more realistically tied to social psychological factors than to economic factors such as travel expenses, Burford suggests that the former warrant particular attention. For many migrants, the psychic cost of moving a given distance and the concomitant anticipation of being separated from friends, relatives and a familiar environment may be considerably higher than the cost of travelling that distance. An interesting example of instances where compensating factors can *override* psychic cost has been documented by Josef Gugler.² In a study of rural-urban migration in sub-Saharan Africa, Gugler found that such patterns, originally triggered by harsh economic reality, eventually became supported by a complex value system which no longer reflected economic motivation. In other words, those who wished respect from family and neighbors, moved. G.N. Ramu, in examining the migration of 'untouchable' gold miners in south India, arrived at similar conclusions.³ This blurring of fact and fantasy may constitute something of a 'Finian's Rainbow' syndrome. After analyzing migration data from the U.S. Social Security Continuous Work History Sample, C.E. Trott⁴ concluded that most migrants moved because of the stereotyped prospects of conditions at destination, rather than simply on account of hard facts they had been given. They literally suffered from a 'money illusion,' predicting their earnings at destination would be significantly higher than previously told.

¹R.L. Burford, "An index of distance as related to internal migration," *Southern Economic Journal* 29 (1962), pp. 77-81.

²Josef Gugler, "On the Theory of Rural-Urban Migration: the Case of Sub Saharan Africa," in *Migration*, ed. J.A. Jackson (Cambridge: Cambridge University Press, 1969).

³G.N. Ramu, "Migration, acculturation and social mobility among the untouchable gold miners in south India," *Human Organization* 30 (1971), pp. 170-178.

⁴C.E. Trott, "Differential responses in the decision to migrate," *Papers of the Regional Science Association* 28 (1972), pp. 91-101.

It is perhaps worth noting that psychic cost can be mediated by technologies which become woven into the cultural fabric. Alan M. MacEachern¹ suggests that, at least in small urban areas of the United States, the conception of distance is more closely related to travel time in an automobile than to 'objective' distance. He uses the data to support a popular view that increased travel time accounts for higher cognitive distance close to city centers than away from them.

Psychic cost also possesses a temporal dimension. Richard Noyes² suggests that specific social frameworks have their own way of seeing time. This 'time horizon,' together with its variants: 'time frame' and 'temporal calibration', appear to vary systematically with education and social class. This notion was first advanced by Edward Banfield in his controversial book 'The Unheavenly City,' published in 1968. Banfield claims that an individual's time horizon is positively correlated with intelligence, which to some extent appears to be a function of education- at least in an applied sense. Thus, for the less intelligent or less educated, or both, the time horizon tends to be somewhat truncated. These individuals have less ability to imagine a future and to postpone gratification in the interest of greater future satisfaction than those blessed with higher intelligence and education. These claims find some compatibility with the literature dealing with migrant selectivity. Everett Lee's³ oft quoted theory of migration postulates that highly educated people who are already 'comfortably situated' frequently migrate under conditions of what Lee calls 'positive selection.' They are under no economic or social pressure to migrate but do so as a result of routinely monitoring opportunities in other regions, and are able to weigh advantages and disadvantages both at origin and destination. By so doing they postpone migration until such time as it becomes a generally favorable proposition. In contrast, those responding primarily to minus factors at origin (not to be confused with compelled migration) tend to be 'negatively' selected.

'On the whole . . . factors at origin operate most stringently against persons who have in some way failed economically or socially. Though there are conditions in many places which push out the unorthodox and the highly creative, it is more likely to be the uneducated or the disturbed who are

¹Alan M. MacEachern, "Travel time as the basis of cognitive distance," *The Professional Geographer* 32 (1980), pp. 30-36.

²Richard Noyes, "The time horizon of planned social change," *American Journal of Economics and Sociology* 39 (1980), pp. 65-76.

³Everett S. Lee, *op. cit.*, pp. 47-57.

forced to migrate.'¹

This, of course, refutes the more popular conclusion that migration is selective of the young and the better educated. Lee adds a useful comment that migration behavior seems to demonstrate a natural 'inertia', meaning a minimum threshold of effort is required before a decision to migrate can be made. Like many students of migration, he sees the decision to migrate as a cost-benefit equation, with barriers to migration taking the form of intervening variables.

The literature is well supplied with examples of such variables and constructs that have been viewed as proxies for psychic cost. Many are culturally grounded, manipulating the datum as it were, from which a prospective migrant sees the world around him. For example, the degree of perceived compatibility with the cultural environment among alternative destinations is believed to play a significant role in the decision-making process. In examining what they call 'migration elasticities' throughout the American states, Michael Greenwood and Patrick Gormely² found that while migrants appeared to be generally attracted to high income states, they also tended to favor those which had a racial profile predominantly similar to their own. Climate was also a intervening factor, and it was interesting to note that blacks were less influenced by climatic differences than were whites. This seems to be further evidence that blacks in the United States still do not enjoy comparable occupational mobility. Whites, on the other hand, can afford to be more discriminating.

Psychic cost as an intervening variable would seem to be a strong element of the so-called 'population turnaround' in the United States. Much has been made recently of the fact that urban growth is slowing down relative to that of the rural sector. Glenn Fuguitt and James Zuches³ found that when respondents were placed in a hypothetical mover context, most opted for a 'rural' place, provided it was within easy commuting range of an adjacent city. It is clear that the urban lifestyle (and all the benefits and obligations that go with it) exerts a strong influence over decisions to flee the city.

Other cultural factors have been shown to play an important role in increasing (or decreasing) the salience of certain destinations over others. Religious affiliation is a

¹Ibid., p. 52.

²Michael J. Greenwood and Patrick J. Gormely, "A comparison of the determinants of white and non-white interstate migration." *Demography* 8 (1971), pp. 141-155.

³Glenn V. Fuguitt and James J. Zuches, "Residential preferences and population distribution," *Demography* 12 (1975), pp. 491-504.

commonplace example of a system involving shared beliefs and values. But while the social and spiritual bonding arising from membership or affiliation is well documented, less empirical attention has been paid to the intervening mechanisms of boundary maintenance. Leo Driedger¹ claims that impelled migration constitutes an important means of maintaining institutional completeness. Old Colony Mennonites, for example, migrate to new areas whenever urban and 'worldly' pressures begin to threaten their traditional way of life. Choosing new locations is a reflection of the degree to which the alternatives may interfere with their shared belief structure. Those who have become co-opted by the larger society are left behind and are therefore 'cleansed' from the system. By this strategy the Order has been able to preserve its control over residential territory, an agricultural economic base, a distinctive ethnic language, limited formal education, large patriarchal endogamous families, and a traditional form of religion.

C. Information Search and the Migration Process

There is ample evidence that the concept of 'psychic cost' contains more substance than simply 'distance.' In fact, it may be argued that this is an entirely inappropriate dimension along which to view the concept. Psychic cost is a friction created by imperfect knowledge. Contrary to classical assumptions, migrants seldom possess a complete knowledge of all relevant factors at destination(s), or even at point of origin. Nor do they necessarily behave in a manner that appears 'rational' to the observer. Gober-Meyers, Greenwood, Wolpert, and Ruth Fabricant² have all acknowledged that most potential migrants possess only partial knowledge of the total locational alternatives available to them, and what information they do have is regularly found to be inaccurate. 'Economic opportunity' thus becomes more correctly 'perceived' economic opportunity. People move on the basis of information gathered. Decisions are based on a relative cost-benefit equation, less intervening barriers to mobility. The point being made here is that information search is vital to the decision-making process of potential migrants and deserves closer empirical attention. Such attention would immediately raise two important

¹Leo Driedger, "Impelled group migration: minority struggle to maintain institutional completeness," *International Migration Review* 3 (1973), pp. 257-269.

²Ruth A. Fabricant, "An exceptional model of migration," *Journal of Regional Science* 10 (1970), pp. 13-24.

questions:

1. Does information search behavior demonstrate predictable patterns among prospective migrants?
2. If so, do these patterns vary systematically in accordance with the conditions under which they operate?

These questions are answered as key issues for this study. It is hypothesized that information search behavior of potential migrants does indeed demonstrate predictable patterns, and that it varies in accordance with migrant attributes and with destination characteristics. Several studies have alluded to these propositions but have never pursued them explicitly or in any depth. Nowhere is this type of information search better illustrated than in the concept of a "migrant stock." Often referred to as 'the friends and relations connection,' a migrant stock comprises friends, relatives, and former work colleagues who have already migrated to one or several destination points. Information networks are established between origin and destination; prospective migrants look to these sources for data regarding job opportunities, wage rates, accommodation, and the social environment. The concept of a migrant stock is certainly not new; as early as 1947 Myles Rodehaver was examining settlement at the urban fringe in terms of information streams operating between the central city and the suburbs.¹ Others have looked at discrepancies between information sources and realized income.²

Greenwood³ is among those who have systematically examined the contribution of a migrant stock in light of computing alternative variables. In a study of U.S. interstate migration he found that while physical distance intervened in decisions to migrate, and while migrants tended to move to states with large labor markets, higher incomes, and temperate climates, inclusion of a migrant stock variable into his regression equation resulted in an appreciable increase in the average r^2 value. Greenwood and Gormely's study of the determinants of white and non-white interstate migration yielded similar findings. Migrant stocks are also closely associated, conceptually at least, with the phenomenon of 'chain migration,' first identified by Ravenstein and more recently defined

¹Myles W. Rodehaver, "Fringe settlement as a two-directional movement," *Rural Sociology* 12 (1947), pp. 49-57.

²P. Nelson, "Migration, real income and information," *Journal of Regional Science* 1 (1959), pp. 43-74.

³M.J. Greenwood, "Lagged response in the decision to migrate," *Journal of Regional Science* 10 (1970), pp. 311-324.

by J.S. and L.D. MacDonald as:

'That movement in which prospective migrants learn of opportunities, are provided with transportation, and have initial social relationships with previous migrants.'

It is clear from MacDonald and MacDonald's definition that while chain migration is not a proxy for a migrant stock, elements of the latter are inherent in the former.¹ Harvey Choldin confirms this in a study of the role of kinship networks in the migration process.² He notes that in chain migration migrants are aided, both materially and morally, from inception of the information search stage to arrival and settlement at destination. Although Choldin's data source was not sensitive to the identification of migrant attributes, his research makes a valuable contribution to the concept of migrant stock as a reference other. This topic will be discussed in the following chapter.

D. Information Search: the Gestalt Tradition

Notwithstanding the body of literature dealing with migrant stocks, surprisingly little attention has been paid to the information search process in migration. The few theoretical perspectives which have emerged invariably subscribe to the Gestalt tradition. Typical of these is Julian Wolpert's celebrated model of decision-making behavior.³ Recognizing that migration viewed along the dichotomous dimensions of endogenous and exogenous variables produces an overly static image of what is essentially a dynamic process, Wolpert has been one of the first to conceptually separate motives from what might be called the 'mechanisms' of migration. The literature is in general agreement that impelled migration has strong economic underpinnings: people move in search of a job or a better job, or better wages. But 'how' do they move? Wolpert recognized the phenomenological aspects of information search; however, he chooses to stress 'perception' as his epistemological datum. This has resulted in a theoretical perspective which is decidedly Gestaltist in orientation. Within this framework he views the mechanisms of migration as taking place along three discrete but interrelated dimensions:

¹J.S. and L.D. MacDonald, "Motives and objectives of migration: selective migration and preferences toward rural and urban life," *Social and Economic Studies* 17 (1968), pp. 417-434.

²Harvey M. Choldin, "Kinship networks in the migration process," *International Migration Review* 7 (1973), pp. 163-175.

³Julian Wolpert, *op. cit.*

1. Place utility
2. A field theoretical approach to information search behavior
3. A life cycle approach to threshold information.

Place Utility. The basis of Wolpert's argument is relative or expected utility. In other words, the actor has a threshold of net utility which is being continually modified by experience. Assuming a natural strain towards inertia, perceived changes in environment and marginal utility derived from adjusting to these changes may predispose the actor to moving. His threshold reference point is seen as a criterion for evaluating place utility. This process stands in contradistinction to other 'alternative' destinations. Unlike experiential place utility, these alternatives lack the support of past reinforcement and are based upon anticipated rewards. Thus, Wolpert sees migration decisions as a function of the best information set among several alternatives.

This conception of place utility bears a strong resemblance to Leon Festinger's theory of cognitive dissonance. Like most consistency theories, Festinger's paradigm proposes that an actor will attempt to perceive and evaluate aspects of his environment in a manner that avoids cognitive contradictions. Lee's theory of migration embodies similar assumptions. Lee conceived of the costs and benefits at origin and destination as occurring within a perceptual action space. Intervening obstacles comprised the inherent frictions to mobility. An important conceptual distinction between the theoretical models of Wolpert and Lee concerns the rationality of decision-making behavior. Since place utility is assessed in terms of past and (expected) rewards realized at the actor's stationary position, Wolpert's model is obliged to assume intendedly rational behavior. The Lee model embraces a temporal dimension inasmuch as intervening obstacles and the changing composition of perceptual sets (costs and benefits) at origin and destination may cause postponement of a move.

E. A Field Theoretical Approach to Information Search Behavior

Wolpert argues that while an actor theoretically has access to a broad range of information, only a limited proportion is relevant at a given point in time. He views this subjective environment as the actor's 'action space' or 'set of place utilities which the

individual perceives and to which he responds.' Use of the term 'action space' is something of a play on words, being derived from the concept of a 'life space,' which in turn belongs to the Gestalt tradition. Gestaltism has evolved from the German 'Gestaltqualität,' meaning 'form quality.' The term was first introduced by Christian von Ehrenfels at a Vienna symposium in 1890. He suggested that an actor's appreciation of form in space and time arises from the perceiver's own activity, rather than being directly given to the senses.¹ As a result of the work of Kurt Koffka, Max Wertheimer, and other Gestaltists since the turn of the century, and through the additional efforts of such men as Kurt Lewin and Fritz Heider, this viewpoint has matured into a broad and well articulated body of theory. Gestaltists view perceptual organization as inherently striving for a 'best fit.' Elements of a situation do not exist in isolation for the perceiver, unless those elements are under particular scrutiny. For example, an automobile is usually perceived as an integrated whole, rather than a collection of interlocking parts. Integration of these parts is largely determined by specific principles of perceptual organization which predispose the actor to deriving the best gestalt under prevailing conditions. Choice among alternatives is based upon the same process.

Wolpert's perspective is modelled after a Gestalt paradigm developed by Kurt Lewin, who studied under several pioneers of the Gestalt movement. Lewin labelled his paradigm 'field theory,' in reference to the psychological force field which he believed held the key to the perceptual process. Behavior, he claimed, must be understood in terms of this field at the time the behavior occurs. This argument is essentially based on the notion that a satisfactory discharge of a perceptual force field (for example, the satisfactory completion of a task) leads to the release of tension. This so-called 'Zeigarnik effect' supports the Gestalt assumption that the history of a situation is irrelevant; it will have the same effect on the subsequent behavior regardless of historical antecedents.² However, Lewin did not deny that an actor's life space is to some extent modified and molded by past events. He viewed the life space as being differentiated into separate but interrelated spheres, which are in turn further differentiated in accordance

¹See William S. Sahakian, *Systematic Social Psychology* (New York: Chandler Publishing Company, 1974), Chapter 17.

²The Zeigarnik effect derives from a series of experiments conducted by one of Lewin's students, Bluma Zeigarnik, on the dynamics of task completion. Lewin's theories on 'tension release' were largely supported by these experiments. Zeigarnik found, for example, that unfinished tasks tend to be remembered twice as well as those completed.

with the actor's range of experience. The degree of differentiation is a function of individual attributes, such as age and intelligence. Moreover, the life space is seen as having degrees of fluidity and reality. For example, as the actor ages, his life space spheres will lose their fluidity from the standpoint of possessing clearly defined experiential compartments. Similarly, age will negatively influence the level of irreality in terms of hopes and dreams, and, conversely, positively influence levels of reality, which Lewin saw as the more objective aspects of the life space. An actor's psychological environment, then, consists of all psychological factors that influence him at any given moment.

Following Lewin's perspective, Wolpert argues that a prospective migrant's action space emerges through a sampling process whose parameters are determined by his needs, drives and ambitions. Sampling and non sampling errors may be expected, largely as a result of distance decay and because of the actor's limited ability to comprehend multi faceted data sources. Consequently, the most salient information becomes that which is in close proximity to the actor.

'Representing the information bits as points, the resulting sampling design most closely resembles a cluster in the immediate vicinity of the stationary position. The individual may be considered at the stationary position within the cluster of alternative places, each of which may be represented by a point on a plane. The consequences of this clustered distribution of alternatives within the immediate vicinity of the individual is a spatially biased information set, or mover-stayer decision based upon knowledge of only a small portion of the plane.'¹

Wolpert notes that cluster sampling may be expected to produce greater sampling bias for a given number of observations than random sampling; however, there is something of a trade-off in terms of cost reductions in the collection of information.

Like Lewin, Wolpert sees the actor's action space as being mediated to a high degree by his life cycle. As the actor matures, his action space expands accordingly; exploration of the environment becomes more efficient. A complex of institutional and social forces articulate with the action space, while differences in sex, race, education, and income are likely to play an important role in defining parameters of the action space. Wolpert also concedes that the action space is defined to some extent by personal attributes and the physical environment. Alternatives in the action space which are salient to the actor become specified by communication networks linking his position to other

¹ Julian Wolpert, op. cit., p. 164.

places. Thus, aspirations arise from accumulated needs and abilities, and communications networks transfer the information necessary for satisfying them.

F. Limitations of the Gestalt Approach

While Wolpert makes a strong case for a perceptual process in information search, he inadvertently draws attention to the crucial issue of salience among information sources. Field theory recognizes the sensory strain toward cognitive consistency within the context of a life space, and it certainly provides conceptual support for the notion that 'information bits,' when assessed in terms of a composite mosaic, take on a significance apart from the individual fragments. However, the perspective fails to explicate the mechanisms by which information and its source are brought together. Moreover, field theory is silent on the discriminating aspects of information search as it articulates with the social milieu. Empirical research indicates that information search is a social process; potential migrants appear to base their decisions largely upon the salience of source alternatives. Therefore, in seeking relevant information and adopting a specific behavior pattern, prospective migrants are doing considerably more than sampling. The socializing aspects of information search suggest that a phenomenological approach is conceptually too narrow and constraining.

Critics have also claimed that field theory's preoccupation with subjective mental states leads to a dangerous neglect of obvious discrepancies between perception and overt behavior. Although there is evidence that Lewin's ahistorical bias has been misunderstood, field theory does minimize temporal considerations. It will be recalled that Lewin did recognize the role of past events in specifying the life space; he simply maintained that these past events are not directly related to behavior. Marvin Shaw and Philip Costanzo¹ use the example of thirst. A person will drink if he is thirsty, regardless of past events that caused the thirst. In other words, a given behavior is seen to be directly related only to a set of circumstances contiguously prior to that behavior. But it is difficult to ignore the cumulative effects of past experience, and it is even less plausible to assume that these cumulative experiences play no intervening role in

¹Marvin E. Shaw and Philip R. Costanzo, *Theories of Social Psychology* (New York: McGraw-Hill Book Company, 1970), pp. 122-123.

decision-making. The evidence suggests much less of an axiomatic relationship between immediately past experience and behavior. Lewin always emphasized a systematic datum in pre-behavioral causation, which cannot help but imply that past events are as metaphysical as those of the future. This perspective stands in direct contradiction to the nature of information search which underscores the temporal dimension of information gathering and the taking of information under advisement. Egon Brunswik¹ has described Lewin's psychology as 'encapsulated.' It 'identifies' the environment in terms of those distal phenomena outside the actor's skin to which the actor responds; the environment is 'described' in terms of its behavioral counterparts rather than by its own pre-ceptual properties. The environments of encapsulated psychologies are transformed into phenomena of the life space, which inadvertently expose themselves to observer interpretation out of context.

It is proposed here that one conceptual strategy by which cognate elements may be reconciled within a sociogenic framework is to view the search for migration-related information as role-taking behavior and the salient sources of such information as 'reference others.' Both concepts are firmly grounded in social behaviorism, specifically a perspective which has become known as 'role' theory. Arguments in support of this position will be presented in the following chapter.

¹Egon Brunswik, "Scope and Aspects of the Cognitive Problem," in *Cognition: The Colorado Symposium*, eds. H. Gruber, R. Jessor, and K. Hammond (Cambridge, Mass.: Harvard University Press, 1957).

III. FOUNDATIONS OF SOCIAL BEHAVIORISM: AN OVERVIEW

It is clear that Gestalt-oriented theories of migration display a marked preoccupation with psychogenic factors at the expense of the social. Moreover, empirical research has provided substantial evidence that in seeking information migrants relate to the values and influence of others.¹ Human behavior is composed of hundreds of experiential fragments, appropriately described by Roger Barker² as 'tesserae,' in reference to the fragments of glass or marble used in mosaic work. Behavioral tesserae characteristically exhibit a strong temporal dimension: the storing of information taken under advisement, postponed gratification, and the calculation of meaning. While these tesserae emerge within the actor's psychological action space, they are necessarily to some extent socially and culturally defined. Human behavior is behavior in context; these behavior settings are behavior-milieu phenomena, and the milieu is circumjacent to the standing pattern of behavior.

Likewise, the perceived salience of information is closely related to the salience of its source. Behavior objects— those objective phenomena adopted by the actor as cognate supports for behavior— may be animate or inanimate, individual or collective. But above all else they are highly discriminated. Koppel,³ in arguing for a sociogenic approach to migration behavior, claims that 'classical' information approaches have placed undue emphasis upon psychogenic factors as intervening mechanisms in relating migration to social organization and social change. He feels that the emphasis should instead be upon social referents. While the conceptual thrust of his research is upon the structural conditions representative of population gains and losses within geographic regions, he identifies a psychological tradition that goes back to the golden years of American pragmatic philosophy. Of course, the intellectual characteristics of pragmatism can be traced to nineteenth century European positivism, even though most of its proponents vehemently eschewed the structural connotations popular in Europe during that period.

Although Charles Horton Cooley, William James, and the 'Chicago' troika of George Herbert Mead, William I. Thomas, and Ellsworth Faris are mainly credited with

¹See, for example, Leszek A. Kosinski and R. Mansell Prothero, eds., *People on the Move* (London: Methuen and Company, 1975.)

²Roger Barker, et. al., *Habitats, Environments, and Human Behavior* (San Francisco: Jossey-Bass, 1979).

³Bruce Koppel, "Toward sociogenic migration theory," *International Migration Review* 10 (1976), pp. 233-248.

nurturing the interactionist perspective, it was James Mark Baldwin who, leaning heavily upon the work of Gabriel Tarde, declared that the ego cannot be viewed as an isolated biological entity. For Baldwin there was no bifurcation of nature: man imitates himself and then others, at which time an intermental process begins. The periodic scions arising from this process he called 'inventions'. William James, a biologist who became one of America's first social psychologists, built upon Baldwin's work in arguing that consciousness, unlike the then popular atomistic position of the German sociological school, is a function of the entire psycho physical context. In other words, there must be a physiological substructure underlying all psychological processes. His celebrated 'stream of consciousness' is phenomenal experience in context.

James was also the first American scholar to explicitly distinguish between the 'Me' and the 'I': the self as known and as knower. He viewed the self as possessing three empirical dimensions: 1. the material self, which encompasses the body and its material supports; 2. the social self, which characteristically presents many different facets in reaction to external stimuli; and 3. the spiritual self which James, like Mead, conceived of as faculties of the mind in combination. These three aspects of the self, in dynamic interaction, formed the empirical self. He maintained that the social 'Me' could only emerge from the recognition accorded by others; and since the 'Me' is obviously perceived differentially by others, there must be as many social selves as there are people, or groups of people, who are significant to the 'Me.' As Deutsch and Krauss¹ note, this is an important seminal point because it represents one of the embryonic cornerstones of what has become known as 'reference group' theory.

Cooley elevated these conceptual fragments into a coherent, albeit incomplete, social interactionist theory of self and society. He, too, rejected the Cartesian view of the individual and society as distinct epistemological realities, stressing instead that the objects of the social world are constitutive parts of the subject's mind and the self.² Cooley's notion of the 'looking glass self' arose from his firm belief that an individual's consciousness as both subject and object can only come into being as the result of contact and exchange with others. Thus, individuals come to predicate their behavior

¹Morton Deutsch and Robert M. Krauss, *Theories in Social Psychology* (New York: Basic Books, Inc., 1965), p. 182.

²Lewis A. Coser, *Masters of Sociological Thought* (New York: Harcourt, Brace, Jovanovich, Inc., 1971), pp. 305-330.

upon the manner in which they feel they may be perceived by others. Like the two-sided coin, there can be no sense of 'I' without a corresponding sense of 'other.' Self and society are indissoluble.

As many critics have noted, Cooley's work was conspicuously lacking in any detailed explication of the genesis of the 'self.'¹ It remained for George Herbert Mead to conceptualize the articulation of what he termed 'mind,' 'self,' and 'society.' Mead considered that one of man's most significant characteristics lies in his ability to manipulate the course of evolution through exercise of his intellect. Unlike proponents of Watsonian behaviorism, Mead perceived the human organism as an active agent, rather than the passive recipient of external environmental stimuli. Like Cooley, he believed that the key to this process was communication, specifically language. According to Mead, humans are uniquely capable of 'significant gestures.' This is not understood simply as *prima facie* communication, but rather in terms of what the communication symbolizes. These gestures become significant when they "implicitly arouse in the individual making them the same responses they explicitly arouse, or are supposed to arouse, in other individuals."²

Mead is probably best known for his conception of the dialectic between the 'I' and the 'Me.' It will be recalled that James first coined these terms in delineating the distinction between the social and the spiritual self. Mead, however, was much more concerned with the genesis of the self as an evolving process. His concept of the 'I' was intended to emphasize the spontaneous and impulsive dimension of behavior. This involves the acting subject who is becoming aware of his environment and the objects toward which interaction must be directed. Being spontaneous, this action is initially undirected. However, the enculturation process brings the individual into focus as an object to himself. This is the 'Me' which continually monitors consciousness, placing the impulses of the 'I' into an accountable position. Thus, unlike Freud's concepts of 'Id,' 'Ego,' and 'Superego,' with which John P. Hewitt,³ in his excellent treatment of symbolic

¹See Roscoe C. Hinkle, Jr., and Gisela J. Hinkle, *The Development of Modern Sociology* (New York: Random House, 1954), Chap. 2.; Jonathan H. Turner, *The Structure of Sociological Theory* (Homewood, Ill.: The Dorsey Press, 1978), pp. 313-314.; Irving M. Zeitlin, *Rethinking Sociology* (Englewood Cliffs, N.J.: Prentice-Hall, Inc., 1973), Chap. 16.

²G.H. Mead, *Mind, Self and Society* (Chicago: University of Chicago Press, 1934), p. 47.

³John P. Hewitt, *Self and Society: A Symbolic Interactionist Social Psychology* (Boston, Mass.: Allyn and Bacon, Inc., 1979), pp. 70-74.

interactionism, feels that Mead's concepts enjoy some similarity, the 'I' and the 'Me' are not rivals but collaborators.

Drawing upon the work of James and Cooley, Mead argued that there is no 'self' at birth; only when the human organism is able to symbolically designate objects in its environment can the self be designated as one of those objects. Self reference begins with a name, which in turn requires the use of personal pronouns, which in turn requires a vocabulary. Mead's 'play stage' are the first steps taken by a child towards socialization. The second stage involves the taking of roles, described by Mead as the 'game stage,' for in an organized game the individual is obliged to take the perspective of others as a whole toward him as a particular player. Thus, in order to perceive oneself, for example, as a hockey goaltender it is necessary for one to possess a composite understanding and awareness of a hockey team, its purpose and structure, and the role of a goaltender in the team and in the game. Hewitt¹ emphasizes this as a sequential process but fails, as most but a few intrepid social theorists have, to attach specific age parameters to these stages. Nevertheless, the child gradually learns its place in the social order, which in its turn gives the child an identity. Mead described this source of influence as the 'generalized other,' stressing that the groups to which an individual subscribes serve as a frame of reference in the formation of a self image.

A. The Emergence of Symbolic Interactionism

Mead's somewhat fragmented thoughts, and those of his contemporaries, gradually coalesced into 'symbolic interactionism,' a term coined by Herbert Blumer, who took over Mead's psychology course when Mead died unexpectedly. Symbolic interactionists generally regard the concrete situations in which patterned relationships take place to be of equal importance as the patterned relationships themselves. They consider it vital to know how people interact, how they communicate, and how roles emerge within the broader framework of social interaction. Moreover, they believe that these processes are best understood in the context of real social situations and in ongoing social interaction. While the ontological implications of these premises are clear enough, they

¹Ibid., pp. 74-81.

also point to a dissatisfaction with the type of micro theories popular among American psychology schools until well into the 1930's.

However, the symbolic interactionist perspective quickly bifurcated into two opposing conceptual positions. Spearheaded by Blumer, the so-called 'Chicago School' takes the view that humans possess the capacity to view themselves as objects and to mentally 'work' any object through an interaction scenario. Implicit here is the assumption that ego is an active creator of his surrounding environment, rather than a passive 'biological sponge' absorbing all that comes his way. Furthermore, disciples of this school of thought stress the creative, constructed, and dynamic nature of interaction; the symbolic nature of such interaction ensures that social, cultural, and psychological structures will be modified as a consequence of shifting the definitions and behaviors of humans in their social context. Blumer has attempted to summarise the basic position of symbolic interactionism in his oft quoted 'three simple premises':

1. Human beings act towards 'things' on the basis of the meanings that these things have for them.
2. The meaning of these things is derived from, or arises from, the social interaction that one has with others.
3. These meanings are handled in, and modified through, an interpretive process used by the person in dealing with the things one encounters.¹

These propositions tend to be deceptively simple, since they embody an extremely complex corpus of notions about the nature of human organization and how the individual articulates with these social networks. It might also be added that Blumer's three simple premises have been far less amenable to empirical validation than to theoretical speculation. To make matters worse he has advocated a view, not shared by all his disciples, of social organization as transitory, arguing that social structure is simply one of many mechanisms employed by humans in defining their immediate situation. Thus, while patterns of social organization define situations, the very symbolic processes that generate and sustain them can at any time change or modify them. Irving Zeitlin² has been particularly critical of this position, claiming that in fact Blumer is presenting a philosophical conception which 'flattens out both "society" and the "individual." Society is viewed as void of structure and individuals equally void of organic drives. This, says

¹Herbert Blumer, *Symbolic Interactionism: Perspective and Method* (Englewood Cliffs, N.J.: Prentice-Hall, Inc., 1969), pp. 50-51.

²Irving M. Zeitlin, op. cit., p. 216.

Zeitlin:

'Is a conception of reality that carries with it an ironic epistemological twist. For if we take this argument literally in its refusal to speak about "units that do not act," it becomes a crude positivism or empiricism for which the only reality is the immediately observable. If one accepts this view, one has no right to employ concepts that have no direct empirical referent. How can one speak of "social classes" if one cannot observe them acting?'

Manford Kuhn, another leading exponent of symbolic interactionism, was closely associated with what has become known as the 'Iowa School'¹ Proponents of this school of thought disagree with the Chicago perspective in several key conceptual areas. To begin with, they argue that humans, through socialization, develop a fairly stable pattern of attitudes toward themselves. The 'core self' mediates the manner in which actors define situations by selecting cues that trigger the process. Kuhn firmly believed that human behavior patterns can be accurately predicted upon a knowledge of the expectations of the groups that have shaped the actor's core self. Unfortunately, like Mead, he experienced difficulty in empirically isolating and identifying these significant others. Undaunted, Kuhn saw the core self, combined with group context, as fundamental mechanisms in constraining interaction; actors behave in accordance with previously developed attitudes and the expectations built into their respective roles, rather than spontaneously constructing new interactions in a given situation.

In character with Kuhn's basic premises the Iowa school has generally sought to emphasize the more structured features of interactive situations, viewing them as stable networks of roles and expectations. While most proponents acknowledge that an interactive situation would be expected to create these networks, once created they would tie participants to the expectations of the roles with which they have been identified.

An underlying question generated by both perspectives is that of causality. Although something of a chicken-or-egg dilemma, a source of controversy has been the issue of whether actors consciously organize themselves or whether organization simply arises from mutual needs and obligation. Blumer and the Chicago school have maintained that human behavior is a continual process of construction based on mutual interpretations, evaluations and definitions. In contrast, the Iowa school has steered a much more deterministic course, claiming that if the social history of an actor can be

¹Jonathan H. Turner, op. cit., pp. 326-346.

indentified, so too can the causal factors underlying the emergence of the actor's core self. Armed with this knowledge it should be possible to identify and understand the causes of behaviors.

Gross¹ feels that these divergent views have led to equally divergent methodological philosophies. Blumer continually criticised traditional research for its tendency to 'lay the script on the actor' by studying phenomena on the basis of pre-established 'truths.' The very processes of symbolic interaction dictate that research methodologies respect empirical reality and utilize this reality as a datum for unbiased examination. The Iowa school, on the other hand, has drawn attention to a fundamental commonality of methods in all sciences. It stresses the task of generating operational definitions of concepts, thus rendering them testable in real-life situations. Kuhn tried tirelessly to measure the core self by means of test batteries indicating degrees of self awareness. Turner² is among those who feel that this approach was too one-sided.

'Most of Kuhn's career was thus devoted to taking the suggestive but vague concepts of Mead's framework and developing measures of them.'

Blumer and his contemporaries have consistently drawn attention to problems of conceptual fuzziness in the interactionist perspective. Indeed, Blumer was harshly critical of the "ambiguous nature of concepts" in the social sciences generally.

'What is needed is a working relation between concepts and the facts of experience wherein the former can be checked by the latter, and the latter ordered anew by the former.'³

As Turner notes, Blumer's brand of symbolic interactionism charted a clear course for theory building. By emphasizing the interpretive and definitional processes of actors and by avoiding 'tenuous definitions,' he executed a decisive swing to what Karl Popper⁴ describes as 'redundant inductivism.' Blumer certainly stressed the need for 'generic' concepts in the social sciences, but in prescribing the processes by which they become operationalized his argument degenerates into an illegitimate teleology. This issue is reminiscent of the polemic which raged nearly forty years ago over the defining of

¹L. Gross, ed., *Theory Construction in Sociology: A Methodological Inquiry* (New York: Harper and Row, 1959), pp. 531-563.

²Jonathan H. Turner, *op. cit.*, p. 33.

³Herbert Blumer, *op. cit.*, p. 173.

⁴Karl R. Popper, *The Poverty of Historicism* (London: Routledge & Kegan Paul, 1957).

operational definitions 'operationally.' Stuart Dodd¹ generated some controversy when he suggested that a definition is "operational to the extent that it specifies the procedure for identifying or generating the definiendum and finds high reliability for the definition." In a reply to this paper, Ethel Shanas retorted that a reliable definition of a concept should be one which may be used by a great number of persons, under varying circumstances, to describe that concept, and not a definition which requires minute duplication of conditions in order to be adequate. Blumer's position seriously limits the possibility of human motivations, attitudes and feelings, since it implicitly denies all social networks except the 'self' indicating itself.

Zeitlin² feels that Blumer has committed a common mistake of confusing the *use* of concepts with their reification.

'What epistemological principle gives one the right, let us ask, to employ the concept of self, and to deny to others the use of concept 'social class,' 'impulse,' etc. Is the concept 'self' more empirically verifiable than the concept 'social class?'

A fundamental problem with symbolic interactionism is that it is a little too psychological in an arena that presumes to explain social organization. Mead never satisfactorily explained how participation in a social structure molds individual conduct, and vice versa. Blumer has fared little better; his broad claim that society *is* symbolic interaction is practically devoid of predictions about the types of emergent structures which may be created and altered by specific types of interactions in specific situations.

B. Role Theory: A Synthesis of Interactionist Perspectives

Unlike Blumer, Kuhn, saw symbolic interaction as occurring within the context of structure. While Blumer insisted that social organization is ephemeral, and therefore, inappropriate as a focus of analysis, Kuhn devoted considerable effort to delineating the structured features of situations. In view of the strong functionalist bias of American sociology, with its emphasis upon 'equilibrium,' and because of the inherent ambiguities surrounding Blumer's 'sensitizing concepts,' Kuhn's perspective is regarded as the conceptual interface between symbolic interaction and what has emerged as 'role theory.'

¹Stuart C. Dodd, "Operational definitions operationally defined," *American Journal of Sociology* 48 (1942), pp. 482-491.

²Irving M. Zeitlin, op. cit., p. 216.

This perspective is largely the product of a perceived need to emphasize 'roles' in social behavior and to gain a better understanding of how they articulate with social networks. Again, much of the conceptual underpinnings originate in American universities, with seminal contributions from European scholars.

Rommetveit¹ has described role theory as the 'theoretical point of articulation between psychology and sociology.' Certainly its antecedents lie squarely in both disciplines. William James, Charles Horton Cooley, and the Chicago interactionist school can be credited with spelling out the conceptual processes of self-awareness and role-taking, while Georg Simmel, Talcott Parsons, Robert Merton, Robert Park, Jacob Moreno and others have explored the structure of status, roles, norms, and expectations within societal organization. Curiously, by embracing both 'process' and 'structure,' role theory presents something of a paradox. In making assumptions about expectations it is plainly not altogether within the realm of behaviorism, but attempts to be so in predicting and explaining social behavior. This ambiguity undoubtedly contributes to a persistent difficulty in developing testable propositions. Consequently, role theory, like symbolic interactionism, has enjoyed considerable currency as a heuristic device but far less empirical validation.

Turner² sees symbolic interactionsim and role theory as two extremes of a conceptual continuum. Blumer's 'generic' orientation represents, possibly, the far left, while Talcott Parsons' highly structured image of status roles within institutionalized social systems might be considered the far right. The extent to which role theory reconciles the inherent deficiencies of symbolic interactionism remains a highly debated topic; there is general agreement that role analysis is far from being a well-articulated and unified theoretical perspective.

For role theorists the object of study is the role enactment of individuals in social settings. In keeping with its pragmatic heritage role theory emphasizes overt social conduct and thus constitutes a radical departure from the Gestalt tradition. The social world is viewed as a network of interrelated statuses; for each position and for their circumcumbent classes and groups there are expectations. The incumbents of these

¹Ragnar Rommetveit, *Social Norms and Roles: Exploration in the Psychology of Enduring Social Pressures* (Minneapolis: University of Minneapolis Press, 1955).

²Jonathan H. Turner, op. cit., p. 347.

positions are conceptualized as possessing two distinct but interrelated attributes: self conception (self awareness), which mediates the actor's interpretation of a particular status or position; and role playing skills, which denote the ability of the incumbent to follow role-specific expectations. Turner summarizes the conforming processes operating upon individuals as follows:

1. The degree to which expectations have been internalised as part of the individual's need structure.
2. The extent to which negative or positive sanctions are perceived by individuals to accompany a particular set of expectations.
3. The degree to which expectations are used as a yardstick for self evaluation.
4. The extent to which expectations represent either interpretations of other's actual responses or merely anticipations of their potential responses.¹

The precise matrix of these processes depends upon the specific interaction situation and the nature of the statuses and attendant expectations. Proponents of role theory thus tend to see the individual as less of a creative role entrepreneur than a 'pragmatic performer who attempts to cope with and adjust to the variety of expectations inhering in social structure.'²

The concept 'role' has far wider implications for role theory than simply identifying status positions. It is viewed as the point of articulation between the individual and the social system within which he operates. The conceptual bridge between role behavior and social structure is that of 'role expectations.' The building blocks of social structure are positions (statuses) and defined in terms of behavior expected or required of the incumbent. Role expectations may vary among populations or within contexts. Roles themselves may be associated with persons or with contexts, or they can be what Bruce Biddle³ calls 'species-wide,' meaning that they enjoy universality among a given species. Roles may be functional, i.e., they contribute to social accomplishment. Biddle sees no reason why two content-specific roles need be mutually exclusive; some behaviors may be occupational, recreational, and economic, simultaneously.

Sarbin and Allen⁴ stress the interbehavioral nature of the concept of social role,

¹Ibid., pp. 352-353.

²Ibid., p. 353.

³Bruce J. Biddle, *Role Theory: Expectations, Identities, and Behaviors* (New York: Academic Press, 1979), pp. 62-65.

⁴Theodore R. Sarbin and Vernon L. Allen, "Role Theory," in *The Handbook of Social Psychology*, 2nd. Edition, eds. Gardner Lindzey and Elliott Aronson (Reading, Mass.: Addison-Wesley Publishing Company, 1968), p. 498.

noting that the occupant of one social position interbehaves with incumbents of complimentary positions. The occupant's conduct takes into account the role behaviors of occupants of other positions and the status of their positions vis-a-vis that of the occupant's. Robert Merton¹ has referred to the totality of complimentary roles related to the occupant's roles as 'role set.'

Role expectations vary along a number of dimensions. One is the degree of specificity; another is the scope of role expectations. Role expectations may also differ in their degree of uncertainty and in the level of consensus over the role among others. Moreover, some roles are far less formal than others, leading Sarbin and Allen² to describe them, after Klapp,³ as 'social types.' Klapp suggests that informal roles are often the progenitors of formal positions. Above all, role expectations involve symbols and they reference human expectations. They are not neutral; rather, they evaluate human characteristics. Role expectations may be covert, implying a tacit individual or shared understanding about a role; or they may be enunciated, which means that they have become normative.

The 'self' is seen by role theorists as functionally inseparable from role enactment. This interrelation of self and role becomes an important factor in determining the quality of role enactment. Sarbin and Allen note, for example, that when self characteristics are congruent with role requirements, role enactment is "more effective, proper, and appropriate" than when role and self are incongruent. They use the term 'self congruence' to denote the degree of overlap or 'fit' that exists between the requirements of the role and the nature of the self.

'Self-role congruence is reflected in observations that the person seems to like the role, is involved in it, and is committed to it. In everyday language self-role incongruence is indicated by saying that a person is not well suited to a particular role, that the job does not fit his personality, or that he is a square peg in a round hole.'

Self-role incongruence is more commonly referred to by role theorists as 'role conflict.' Individuals who hold a multiplicity of roles that are incompatible with one another, or who have expectations that are similarly incompatible are said to be in a role conflict situation. One important elaboration of this situation which needs to be

¹Robert K. Merton, "The role set," *British Journal of Sociology* 8 (1957), pp. 106-120.

²Theodore R. Sarbin and Vernon L. Allen, op. cit., p. 449.

³O.E. Klapp, *Heroes, Villains, and Fools*. (Englewood Cliffs, N.J.: Prentice-Hall, Inc., 1962).

mentioned, however, is that of 'role complimentarity,' which J.P. Speigel¹ conceives of as culturally patterned ways of 'unthinking' interaction. The notion goes hand in hand with 'equilibrium,' which takes place when 'other' and 'ego' are in agreement over each other's roles.

'As long as complimentarity is maintained at high levels of equilibrium, decisions are decentralized, so to speak. They are taken care of by the system of role relations rather than by the person's acting in a self conscious manner.'

The legitimizing dimension of role complimentarity cannot be ignored any more than its institutional aspects. To use a concrete situation, the peace loving husband and father may find himself occupying the role of soldier if called upon to serve his country. The roles of peace lover and potential killer would be intolerable without legitimization by the state. Another way of looking at this issue is in terms of what Ralph H. Turner calls 'role merger.' Person and role are said to be merged when:

'There is a systematic pattern involving failure of role compartmentalization, resistance to abandoning a role in the face of advantageous alternative roles, and the acquisition of role-appropriate attitudes.²

Within a conceptual framework of interaction, role consistency, and consensus, Turner proposes that the easiest way for an individual to be comprehensible to others is to be the person they have constructed from his perceived role(s). This type of conformity is another means of reducing role conflict resulting from the incompatibility of social positions.

C. Some Current Criticisms of Role Theory

Role theory has attracted more than its share of critics. Marvin Shaw and Philip Costanzo³ reflect a common view that the perspective, like most which are conceptually tied to structural functionalism, presents an overly static and circumscribed picture of human behavior. Although recognition is made of the feedback consequence of role enactment for expectations, analysis is often one-sided, emphasizing the manner in which individual behaviors affect the reactions of others so that self-conceptions are reinforced or

¹J.P. Speigel, "The Resolution of Role Conflict within the Family," in *The Family*, eds. Norman W. Bell and Ezra F. Vogel (New York: The Free Press, 1960), pp. 361-381.

²Ralph H. Turner, "The Role of the Person," *American Journal of Sociology* 84 (1978), pp. 1-23.

³Marvin E. Shaw and Philip R. Costanzo, *Theories of Social Psychology* (New York: McGraw-Hill Book Company, 1970).

altered. Some critics take issue with the strong dramaturgical underpinnings of role theory. Even some of the perspective's ancillary concepts, such as role-taking, role expectations, role complimentarity, and role merger are borrowed directly from the stage.¹ All imply the playing of a role, and therefore, following these analogies to their logical conclusion, one would be obliged to assume that role playing is divorced from reality. In which event, how can it reflect the empirical social world? Proponents have attempted to circumvent this accusation by referring to 'role enactment.' Unimpressed, E.F. Borgatta² goes so far as to suggest that dramaturgical models are not amenable to empirical validation.

There are other difficulties with the operationalization of the role perspective. Turner³ notes that while theoretical considerations usually focus upon causal relationships among role components, empirical research is often forced to deal with these components discretely. This invites reductionism or 'misplaced concreteness,' and possible invalidation of instrument design. Mostly importantly, however, critics have pointed out that the main thrust of role theory has been upon the consequences of specific social contexts for variations in individual conduct. The result has been a Parsonian construction of social order, without specifying how, or even why, such structures are developed, maintained, or altered. With such one-sided reasoning a major difficulty arises when attempts are made to link self-related variables to expectations. Margaret Coulson⁴ also draws attention to the failure of role theory to accommodate the lack of consensus among different people in their expectations of the incumbent of a particular position. These criticisms can hardly be defended within the functionalist frame of reference without resorting to tautological explanations. Consequently, many conceptual elements of the role perspective become totally devoid of any predictive utility and degenerate into a sterile taxonomy. Nowhere is this more evident than in Biddle's magnum opus, which would put the Oxford Dictionary to shame.

¹See L.J. Neiman and J.W. Hughes, "The Problem of the Concept of Role: A Re-survey of the Literature," *Social Forces* 30 (1951), pp. 141-149.

²E.F. Borgatta "Role and Reference Group Theory," in *Social Science Theory and Social Work Research*, Ed. L. Logan (New York: National Association of Social Workers, 1960), pp. 16-25.

³Jonathan H. Turner, op. cit., pp. 362-363.

⁴Margaret A. Coulson, "Role: A Redundant Concept in Sociology? Some Educational Considerations," in *Role*, Ed. J.A. Jackson (Cambridge: Cambridge University Press, 1972), pp. 107-128.

However, the theoretical limitations of role theory in explaining or predicting emergent social systems do not necessarily apply to its sub-concepts. Of central concern to this study is the articulation between the social self and what Mead called the 'generalized other.' Conceptually this is perhaps the most important link between social structure and role behavior, since the mechanisms whereby role enactment develops and changes clearly imply a process. Although the dyad is usually considered by role theorists as an appropriate unit of analysis, it is obvious that the role enactment process can also be conceptualized as a triad. This third party, dubbed by Sarbin and Allen¹ as the 'audience,' is viewed as involved in, but not necessarily present in, role enactment. The triadic structure would thus consist of:

1. The role actor.
2. The individual in the complimentary role.
3. A third party involved in the role enactment process.

The audience was seen by early social psychologists as relatively passive, functioning as a source of negative or positive feedback. Cues elicited from the audience would guide ongoing role enactment of the primary dyad. As a result, most empirical research concerned itself with the effect of the audience as 'observer' upon individual behavior. In fact, this conception is an expanded interpretation of Mead's dialectic between the 'I' and the 'Me,' with the former mediating the latter. However, it became obvious that an audience must be more realistically understood in terms of a group which in itself must be conceptualized as functionally dynamic, being constantly shaped by its members and others with which it comes into contact. An audience must, therefore, be seen as a source of new and ever changing interactions along contextual and temporal dimensions. The acknowledgement that role enactment may be predicated upon the influence of an audience which may be only cognitively present gave rise to the theory of reference groups. It is the possible function of such reference groups in the decision-making behaviors of migrants that informs the theoretical basis of this study.

¹Theodore R. Sarbin and Vernon L. Allen, op. cit., p. 528.

D. The Reference Group Concept

It will be recalled that Mead viewed the social self as largely a product of the influence of 'significant others' in the actor's environment. He never specified precisely who these others are and indeed gave little consideration to the manner in which an individual's social experience is shaped by societal organization.

H.H. Hyman¹ was probably the first North American scholar to specify and label the point of articulation between attitude formation and the source of salience. In a study of individual conceptions of status relative to significant others, Hyman coined the term 'reference group' to identify those to whom the actor turned as a social framework for comparison. The 1940s and '50s saw considerable expansion of the concept. More recently it has given way to the study of 'networks,' although the conceptual underpinnings remain basically untouched. Robert Merton and Alice Kitt² have been credited with clarifying the conceptual principles of reference group behavior. Perhaps the most important of these is that of relativity. Actors evaluate their circumstances and calculate salience of significant others relative to their own life experience. In the United States' War Department's classic study of the American soldier, Merton and Kitt realized that a G.I.'s evaluation of army experience was made relative to his own socioeconomic and racial background, rather than purely on the basis of conditions prevailing in the American army at the time. In other words, the independent variable shifted from that of the military to that of the actor's sociocultural background. Merton and Kitt declared that a fundamental issue of role theory is the perceptual process by which actors orient themselves to groups and individuals, and subsequently internalize them as significant frames of reference in their own attitude and behavior formation.

Robert E. Clark³ in a study of juvenile delinquency, suggests this process be understood in terms of; 1. The social situation; 2. the actor's own needs; 3. his normative orientation; and 4. societal demands.

¹Herbert Hiram Hyman, "The Psychology of Status," *Archives of Psychology*, #269 (1942).

²Robert K. Merton and Alice S. Kitt, "Contributions to the Theory of Reference Group Behavior," in *Continuities in Social Research: Studies in the Scope and Method of 'The American Soldier'*, eds. Robert K. Merton and Paul F. Lazarsfeld. (Glencoe, Ill.: Free Press.

³Robert E. Clark, *Reference Group Theory and Delinquency* (New York: Behavioral Publications, 1972).

'They are intercorrelated, as seen in the observations that the social situation is defined in terms of the person's needs, norms, and social pressures; that many of his needs are socially derived, developed through reinforcement in a social setting; and that the demands of one's fellows rest in large part upon a normative orientation which they share with the actor.'

Here Clark is making an obvious, but nevertheless important, point that an actor's affiliation with a reference group is largely the product of specific needs generated by the social environment and mediated by internalized norms and values. Just as roles may be type and context-specific, reference groups may serve an actor's needs or goals within highly defined time and situation frames.

Addressing this adoption process, Herbert Kelman¹ proposes three stages by which an actor responds to social influence:

1. *Compliance*, when the actor accepts influence from a reference group. The degree of influence is a product of 'rewards' minus the 'costs' of adopting specific attitude or behavior patterns.
2. *Identification*, occurs when the actor accepts influence from the reference group in order to establish and maintain a desirable relationship with the group, thereby achieving and sustaining a satisfactory self-conception.
3. *Internalization*, is reached when the actor accepts influence essentially because it is congruent with his value system while at the same time demanded by it.

One important area of disagreement has been over what, precisely, constitutes a 'group.' Merton has acknowledged that the term, while descriptively appealing, is in fact misleading, since the actor may secure self judgement from a variety of sources. Recognizing this difficulty at an early stage, Tamotsu Shibutani² was quick to adopt the term 'significant other,' devised by Harry Stack Sullivan, in his work on the reference group perspective. Clark agrees, suggesting that significant 'others' may be grouped into four rather broad categories: the 'group,' the 'collectivity,' the 'social category,' and the 'reference individual.' This strategy does not, however, settle the issue of whether significant others should be recognized purely as physical realities or whether their connotive derivations may function as a frame of reference. This is somewhat akin to the common question of whether an individual is influenced by an idea, or more by what the idea implies. In the context of reference groups a consideration of equal importance to sheer numbers is the 'ambience' they may create. Thus, their salience to the actor may be as much a function of what they 'represent' as what they 'are' in physical terms.

¹Herbert C. Kelman, "Processes of Opinion Change," *Public Opinion Quarterly* 25 (1961), pp. 55-77.

²Tamotsu Shibutani, *Society and Personality* (Englewood Cliffs, N.J.: Prentice-Hall, 1961).

Raymond Schmitt¹ suggests that the difficulty can be partly circumvented by simply replacing the term 'reference group' with 'reference other.' The basis of his defense of this term revolves around the fundamental individual-other typology. Following Blumer's view that concepts in the social sciences will never be able to entirely include the 'peculiarities' of the setting in which they appear, Schmitt considers it necessary to dwell more upon conceptual relationships than upon isolated concepts. Of these, the nature of the reference relationship enjoys prime importance and Schmitt suggests it be characterized in terms of three dimensions:

1. *The Type of Reference Relationship.* Three types of influence are identified which the reference other exercises over the actor:

a) The Identification-Object Reference Relationship. This is considered to exist when the actor's level of positive or negative sentiment toward the reference other is sufficient to direct behavior toward the latter as an 'object.' Schmitt points out that his term 'sentiment' refers to a 'feeling state,' reflecting what the reference other means to the actor.² What Schmitt is saying here is that a reference other may serve as a source of inspiration or may 'evoke' a certain sentiment although the actor may not wish to become physically involved with it. For example, many white Canadians express empathy for the native philosophy of life but entertain no notions of living it.

b) The Normative Reference Relationship, which exists between the actor and the reference other when the former's overt or covert behavior is being influenced by the reference other. The most important identifying characteristic of this reference relationship is that the actor becomes influenced by the perceived norms or values of the reference other. Schmitt notes that the reference source may be an individual, or quasi empirical reference other, an imaginary reference other, or a physical group. Moreover, membership is not a necessary precondition. This is an interesting observation and one which is undoubtedly informed by the earlier writings of Harold Kelley,³ who distinguished between two

¹Raymond L. Schmitt, *The Reference Other Orientation* (Carbondale, Illinois: Southern Illinois University Press, 1972), pp. 39-40.

²Ibid., pp. 60-70.

³Harold H. Kelly, "Attitudes and Judgements as Influenced by Reference Groups," in *Readings in Social Psychology*, eds. Guy E. Swanson, T.M. Newcombe, and Eugene L. Hartley (New York: Henry Holt and Company, 1952), pp. 410-414.

functional¹ types of reference other, namely, the 'normative' and the 'comparative.' Kelly saw the former as a source of values for the actor, which he assimilates. However, in addition to setting standards it is clear that Kelly intended the term to enjoy some capacity for enforcement, whether this be covert or overt. Obviously, this implies that the reference other is able to apply sanctions in order to substantiate its influence. Shibutani and others have noted that the most commonly applied sanction is that of withholding membership. Without such membership it is difficult to conceive of a normative relationship. Schmitt defends his position by viewing the reference other as holding normative influence if the actor acts in some manner with regard to the norms of the reference other.² There are two weaknesses in this defense. Firstly, it is of necessity predicated upon some form of overt behavior, since without such behavior it would be impossible to verify influence. Such behavior is obviously open to scrutiny by the reference other, who (which) can then determine future responses based upon the attitude of the actor. Secondly, Schmitt's argument compromises the distinguishing criteria between this type of reference relationship and that which he terms, after Kelley, the 'comparative' reference other.

c) The Comparative Reference Relationship. Again, Schmitt builds upon Kelly's work in defining this relationship as one which exists between the actor and the reference other if 'the individual compares himself (or others) to the reference other on some dimension(s) and is influenced in either an overt or covert manner.' He also notes that while comparative reference others are not primarily a source of norms, values, or perspectives,² they do, nevertheless, exert specific influences over the actor. Kelly, for example, viewed the comparative reference other as a source with whom (which) the actor compares and evaluates himself. Accordingly, he may or may not enjoy membership affiliation.

¹Kelly distinguished between reference others as sources of values and reference others as standards in themselves.

²Shibutani is among several writers who have claimed that, since Kelly's concept is not invariably a source of norms and values, it fails to qualify as a reference other. However, as pointed out earlier, the key criterion is that of 'sanction.' It may be argued that the central notion of influence can only be discriminated on the basis of whether or not the actor is able to reject it without 'cost.'

2. The Scope of the Reference Relationship. Here Schmitt is referring to the extent of influence that the reference other exerts over the actor. In other words, the scope of influence is regarded as a variable. This is an important observation, since it underscores the point that significance of the reference other for the actor can only be appropriately understood from the viewpoint of the actor. Thus, in addition to their type and situation-specific nature, reference others emerge as empirical realities only when they become salient to the actor. Schmitt acknowledges that these influences can possess entirely different subjective roots. In normative reference relationships, compliance may occur through internalization of norms and values, or it may occur through a more indirect respect for the ambience which the reference other generates. He quotes the scenario of the teenager who refrains from behavior deemed improper by her parents, not because of internalization of their values but because of her respect for them as parents. Unfortunately, Schmitt then proceeds to confuse the issue by observing that this type of reference relationship could occur among membership or non-membership reference others, since it is not dependent upon sanctioning behavior. This implicitly flies in the face of his earlier arguments in support of normative reference relationships.

The scope of the comparative reference relationship can be expected to reflect the dimensions of comparison, the degree of gratification (reward) resulting from such comparison, and the range of other behaviors that stem from the act of comparison. Similarly, the scope of the identification-object reference relationship reflects the intensity of sentiment held by the actor and range of non-normative influence exercised by the reference other.

3. The Role Character of the Reference Relationship. Schmitt argues that the influence of reference others may be attributable to one or both of two distinct generic characteristics: a) Where the relationship is related to a role or roles played by the reference other and interpreted accordingly by the actor, and b) where the relationship is more specifically between the actor and the reference other as a 'person.' Obviously, situations may occur in which the reference other is perceived in both contexts. For example, a university professor may function

as a reference other purely through his role as a teacher, or as a model of 'respectability,' or both.

E. Problems of Causality

Perhaps the most problematic aspect of the reference group perspective, aside from empirical validation, is that of prediction. Precisely what mechanisms can be shown to operate in social relations that determine whether an actor will select one reference other over another, or even a reference other at all? Moreover, what determines that a reference other will be selected above others which may be equally relevant? Most proponents of the reference other perspective have attempted to answer these questions within the context of a sociocultural system. Merton,¹ for example, suggests that social systems possessing high mobility function to promote the adoption of non membership-groups as reference others. His argument is based upon what he terms 'anticipatory socialization,' where assimilation of a reference other's values often begins in highly mobile societies before changes in status actually take place. Merton also feels that the ability of non-membership reference others to confer prestige upon the actor will influence salience, as will the degree to which an actor is involved with that reference other. Thus, an individual who tends to be a loner will be more likely to choose a non-membership other than one who is central to his group. Schmitt concurs with Merton's position, noting as a point of support that reference relationships tend to vary across sociocultural systems, citing the family as one example.

The problem with explanations based on this perspective is that they fail to conceptually separate the social system from the reference other. Such a fundamental position creates difficulties that become worse as the logical argument progresses. To begin with, the causal imagery of such an interrelationship presents a non-recursive model involving the actor and the social system/reference other as dependent and independent variables, respectively. In regarding the reference other as independent one would be obliged to argue that it 'causes' the behavior of the actor. Moreover, to imply, as this model does, that reference others emerge from the social system for the

¹Robert K. Merton, *Social Theory and Social Structure*, 2nd. ed. (Glencoe, Ill.: The Free Press, 1957)

purpose of mediating an actor's behavior amounts to teleological reasoning. It is clearly untenable to regard the actor as unvaryingly the dependent variable. Empirical research has shown that self-characteristics represent an important element of the causal loop.¹

The operationalization of concepts into variables carries with it certain obligations. As H.W. Smith² notes, a variable is a rather special type of concept which must be reducible to two or more mutually exclusive and totally inclusive categories which explicitly vary in degrees. It would seem that this is the root of the reference other dilemma: namely, that researchers have persistently tried to operationalize it as a variable when it should more appropriately remain a concept. The most satisfactory manner of accomplishing this task would be to develop a purposive-recursive model of the role relationship, with the reference other as an intervening variable. Conceptually, this might be seen as a social filter through which the actor and the social system develop, reconstitute, and modify new roles and behaviors.

To refine this argument it is necessary to briefly examine the nature of an intervening variable. Fred Kerlinger³ describes such a variable as: 'A term invented to account for internal and directly unobservable psychological processes that in turn account for behavior.'

Intervening variables are thus inferred from behavior. To use Kerlinger's expression, they are 'in-the-head' variables and therefore not directly measurable. In certain situations they will intervene to produce a specific, or series of specific, behavior patterns. Indeed, Kerlinger regards the term 'intervening variable' and 'construct' to be synonymous. More specifically, intervening variables may act as 'latent' causes of observable variables. The link between theoretical and observational variables is what Peter Abell⁴ considers to be 'synthetic.' He claims that for a 'latent-causal conception to be empirically feasible, mechanisms are needed for observing and characterizing groups

¹See E.F. Borgatta, "Role-playing specification, personality, and performance," *Sociometry* 24 (1961), pp. 218-233; H.H. Kelley and E.H. Volkart, "The resistance to change of group-oriented attitudes," *American Sociological Review* 17 (1952), pp. 453-465; S. Schachter and J.E. Singer, "Cognitive, social and physiological determinants of emotional state," *Psychological Review* 69 (1962), pp. 379-399.

²H.W. Smith, *Strategies of Social Research: The Methodological Imagination*. Englewood Cliffs, N.J.: Prentice-Hall, Inc., 1975.

³Fred N. Kerlinger, *Foundations of Behavioral Research*, 2nd. ed., (New York: Holt, Rinehart and Winston, Inc., 1973), pp. 40-45.

⁴Peter Abell, *Model Building in Sociology*, (London: Weidenfeld and Nicolson, 1971), pp. 93-99.

independently of the properties of their individual members.' The logical limitations of defining theoretical variables in terms of observational variables are fairly obvious. Abell points out that if the theoretical variable plays only a summary role it is tautologous to attempt a direct analytical link between it and any observational form. Reference others are clearly not directly measurable; rather, it is the behavior patterns of the actor which are attributed to reference other influence and accordingly quantified— as are actor characteristics. It therefore follows that reference others should not be seen as a purposive end in themselves but, rather, as a 'means to an end.' The actor (and his behavior patterns) and his social system may be operationalized into variables; reference others, as constructs, should not.

The utility of this argument, of course, is that the onus of causal explanation is shifted from the reference other to one of the true variables. Issues of salience can be directed toward the actor and his goals and aspirations. Instead of asking 'why' a reference other becomes salient, it would seem to be more appropriate to ask 'how' by exploring systematic relationships between the actor and his behavior patterns. Recalling Theodore Newcombe's celebrated study of attitude change among students at Bennington College, Kerlinger notes that this was more or less Newcombe's strategy. However, Newcombe never used the term 'reference group,' and his data were circumscribed by a laboratory-type methodology in what was purported to be a field study.¹ A study by Seymour Lieberman² represents another early, but still implicit, conceptualization of a reference other as an intervening variable. In a study of attitude change among factory workers as a result of promotions and demotions, Lieberman found that role norms served to significantly modify incumbent attitudes toward the job, management, and fellow workers. He introduced two possible causal mechanisms to account for these changes: 1. a 'reference group' principle, which suggests that a change in roles involves a change in reference groups... which leads to a change in attitude, which in turn may lead to changes in behavior; and, 2. the 'self consistency' principle, which suggests that a change in roles involves a change in functions, which leads to a change in actions, which in turn leads to a change in attitudes. Unfortunately, Lieberman's faulty instrumentation

¹Fred N. Kerlinger, op. cit., pp. 397–398.

²Seymour Lieberman, "The effects of changes in roles on the attitudes of role occupants," *Human Relations* 9 (1956), pp. 385–402.

made it difficult to arrive at any firm conclusions.

Early empirical research into the differential adoption of reference others was spearheaded by Siegel and Siegel,¹ who examined attitude change among women students at an American co-educational university. Their data suggest that attitude over time is indeed related to differential identification of reference others. Their study design was also able to demonstrate an operational distinction between membership and non-membership group identification.

F. Information Search and the Reference Other Perspective

The purpose of this chapter has been to argue that the role and reference other-theoretic literature presents a convincing perspective from which to view the potential migrant and his search for migration-related information. It suggests a type and situation-specific causal imagery, with the reference other functioning as intervening variable in the information search behavior of potential migrants. As previously pointed out, researchers have noted, albeit in implicit fashion, that migrants do indeed relate to significant others in their search for information and in the decision whether or not to migrate. The following chapter will discuss the selection of reference others and the manner in which this selection process articulates with the socioeconomic, demographic, and social-psychological attributes of potential migrants.

¹Alberta Engvall Siegel and Sidney Siegel, "Reference groups, membership groups, and attitude change." *Journal of Abnormal Social Psychology* 55 (1957), pp. 360-364.

IV. THREE REFERENCE OTHER TYPOLOGIES

So far, only scant reference has been made to the relevance of information search for manpower mobility in single resource industry communities. However, it will be recalled that a central concern of this study is to determine whether the mechanisms of migration decisions are discriminated on the basis of destination characteristics. In other words, does the information search behavior of migrants to SRICs differ significantly from that of migrants to other destinations? It has been suggested in previous chapters that these processes are indeed discriminated on the basis of both destination and the socioeconomic characteristics of migrants. While the motivating forces of impelled migration seem to be common to all destinations—people are inspired by the prospect of jobs and/or better wages—there is a distinct possibility that some discriminant utility will be revealed in information search patterns.

Empirical evidence suggests that the salience of reference others, insofar as information search is concerned, is very much a function of the personal attributes of the migrants, notably those relating to education and occupation. For example, Harold Sheppard and A.H. Belitsky¹ have documented a significant relationship between job search patterns—which are probably synonymous with information search in this context—and occupational strata. If this evidence proves to be reliable it follows that the utilization of reference others as an intervening variable in the process of information search must be discriminated on the basis of socioeconomic strata. Thus, information search in the context of migration behavior becomes a useful datum from which to develop a series of alternative reference other typologies. Three are presented and discussed here: 1. migrant stock; 2. mass media; and 3. employment networks.

A. Migrant Stock as a Reference Other

The migration literature provides ample evidence that friends and relatives are important sources of information on job opportunities, wage rates, and other conditions at destination.² However, for certain socioeconomic strata the role of friends and relatives

¹Harold L. Sheppard and A. Harvey Belitsky, *The Job Hunt* (Baltimore, Maryland: The John Hopkins Press, 1966), pp. 44–48.

²See Ruth A. Fabricant, op. cit.; Patricia Gober-Meyers, op. cit.; Michael J. Greenwood, op. cit.; J.P. Fitzpatrick, "The importance of 'community' in the process of immigrant assimilation," *International Migration Review* 1 (1966), pp. 5–16.

appears to be more than that of providing moral support. For example, the type of information sought by blue-collar workers, particularly the less skilled, seems to be much more general than that sought by the white-collar occupations.¹ Blue-collar workers are less likely than their white-collar counterparts to be hired prior to arriving at destination; instead, they tend to move on the basis of a 'job climate.' Information provided by friends and relatives is usually less job-specific than it is lifestyle oriented.

Migrant stocks are instrumental in establishing and maintaining a flow of such information to points of origin. Based on this information individuals will decide whether or not to migrate, a process that Greenwood has termed a 'lagged' response. But the salience of a migrant stock seems to be highly discriminated in terms of the educational and occupational characteristics of the migrants. In their study of job search behavior among unemployed workers in Erie county, Pennsylvania, Sheppard and Belitsky found friends and relatives at destination to be the most common source of job and related information among blue-collar workers. Indeed, there was a systematic inverse relationship between utilization of a migrant stock and skill levels, with unskilled workers using these sources more than semi-skilled and skilled workers respectively. Obviously, these findings reflect differential education levels to a high degree and they tend to support other research confirming a similar inverse relationship between education levels and the influence of kinship ties.²

When viewed as a reference other, it becomes clear that the influence of a migrant stock displays several discrete characteristics. A prospective migrant who utilizes friends and relatives in his information search behavior is tacitly comparing their life chances with his own. The success, or lack of it, that their decision to migrate brought them will be weighted by the prospective migrant and will influence the salience generated by that information source. In short, the level of salience enjoyed by a migrant stock, or any reference other for that matter, corresponds to the extent of its situation-specific influence. This point derives from the basic concepts of symbolic interactionism. It will be remembered that Kelly considered comparative reference groups as "(Those) which the person uses as a reference point in making evaluations of himself

¹See, for example, Donald J. Bogue, "A Migrant's-Eye View of the Costs and Benefits of Migration to a Metropolis," in *Internal Migration*, eds. Alan A. Brown and Egon Neuberger, op. cit.

²Michael J. Greenwood, op. cit., p. 406.

or others.¹ Some dispute exists over whether comparative reference others qualify as such on the grounds that they are not a source of norms or values.² But in fact they are; an important distinction is that this normative or valuative influence is largely relative and therefore has no ontological significance out of context. Schmitt has drawn attention to several distinctive forms of the comparative reference other, noting Theodore Kemper's concept of 'equity' in the reference relationship. Kemper qualifies an equity comparative reference relationship as one in which an actor utilized a reference other for the purpose of assessing whether or not his situation is fair or equal. It would seem that the function of a migrant stock corresponds rather closely with these terms of reference.³

However, the social aspects of an actor's involvement with a migrant stock also suggests a normative function in the reference other relationship. The fact that, for certain socioeconomic strata, the thought of separation from family and friends can be traumatic indicates a form of influence much less situation-specific than a purely comparative relationship. More importantly, family and friends are able to apply sanctions if the actor fails to modify his behavior in accordance with their values. The most common type of sanction would be physical or social exclusion from the reference other's activities. Schmitt identifies three dimensions of the normative reference relationship: 1. compliant; 2. identification; 3. internalized.⁴ The actor is said to have a compliant relationship when he observes the reference other's norms and values in order to reap some tangible reward. There is not usually an internalization of norms, but a behavioral response. An identification relationship exists when the actor is identified with the reference other. Again, Schmitt emphasizes that norms are not usually internalized. An example of this type of relationship was offered in Chapter Three in the case of the teenage daughter who conformed to her parents' norms and values out of respect for them as individuals. Finally, an internalized relationship emerges when the actor 'absorbs' norms and values of the reference other. This, according to Schmitt, may arise from an identification-object relationship. Several researchers have pointed to the absolute devotion and loyalty accorded Adolf Hitler by his party faithful during the period of the

¹H.H. Kelly, "Two Functions of Reference Groups," in *Readings in Social Psychology*, eds. G.E. Swanson, T.M. Newcomb; and E.L. Hartley. (New York: Henry Holt, 1952).

²Tamotsu Shibutani, "Reference groups as perspectives," *American Journal of Sociology* 60 (1955), pp. 562-569.

³Raymond L. Schmitt, op. cit., p. 65.

⁴Ibid., pp. 66-68.

Third Reich. Japan's Second World War kamikazi pilots, who deliberately smashed their aircraft into Allied ships, are another example of complete internalization of a value system as well as devotion to a cause.

It is likely that a migrant stock incorporates all these dimensions in varying proportions at varying points in time. Migrants who utilize friends and relatives during information search also frequently move in with them temporarily upon arrival at destination. This places the migrant under some obligation to conform to certain rules of behavior, which consequently generates a compliant and/or identification relationship, depending upon the specific situation. The actor may also have a deep respect for the reference other in question, using it as a role model in determining his own standards of behavior. A considerable amount of empirical work on family relations among blue-collar workers has been conducted in Britain. Findings indicate, as they do in studies of working class neighborhoods in large American cities, that where fathers (often absentee fathers) rarely enjoy the respect for their children, other family members perform a surrogate function. Matriarchal families are common, but extended family members can often be found as role models for juveniles and young adults.¹

There is an element of persistence and continuity in the relationship between a prospective migrant and a migrant stock. Social or kinship linkages that may derive from prior migrations or home community networks are carried through space and time as an ongoing process. Such continuities have a profound influence on these relationships, the type and scope of which become fused into a pervasive web of roles and obligations. Nevertheless, there seems to be little doubt that a migrant stock functions effectively as a reference other for certain socioeconomic groups, and that it functions primarily as an intervening variable in the search for destination-related information.

Perhaps the most significant implication of a migrant stock for migration to single resource industry communities can be found in the high mobility of SRIC populations. It hardly needs to be stressed that in order for a migrant stock to become operative the population has to be sufficiently stable for a migrant stock to develop. Practically all of the documentation relating to migrant stocks derives from the urban experience. It

¹See, for example, J.M. Mogey, "Changes in family life experienced by English workers moving from slums to housing estates," *Marriage and Family Living* 27 (1955), pp. 123-132.

follows that urban places, particularly those with large populations and a diversified economy, would be expected to encourage a more clearly defined migrant stock. The case of Edmonton, Alberta, makes a useful example in this regard. Alberta's economic boom, which surged dramatically during the late 1970s and early 1980s, has attracted migrants from all parts of Canada. Many appear to stay, provided there are jobs; manpower turnover rates and rates of out-migration from large urban areas, especially those which are economically healthy, are much lower than those normally prevailing in SRICs. While Edmonton presently (1981) attracts over two thousand in-migrants each month, evidence indicates that proportionately fewer than those in SRICs migrate out after a short period of time.¹ These factors point to the existence of comparatively stable migrant stocks in areas of high population density.

This situation does not appear to prevail in SRICs, where high rates of in and out-migration must surely compromise the emergence of a viable migrant stock. Indeed, it is not uncommon for a migrant to move to a SRIC on the recommendation of a friend or relative, only to find that the individual has moved on by the time the migrant arrives. This does not, of course, totally compromise the function of a migrant stock but it does limit the scope of the reference relationship. Generally, researchers have noted not only high rates of in and out-migration but also a reluctance on the part of many people to remain in these communities for long. These findings raise an important question: If those who would normally utilize a migrant stock in their information search behavior find that such an information source is not operational at destination, to whom or what do they turn as a surrogate?

B. Mass Media as a Surrogate for Migrant Stock

Proponents of the reference other perspective like to point to the eclectic source of salient reference others.² Consequently, an examination of the role of mass media in information search and attitude formation provides support for the proposition that they qualify as a reference other and, further, that they can also perform a surrogate role for

¹See Glenn V. Fugitt and James J. Zuiches, op. cit.; Samir N. Maamary, op. cit., Chapter 5; J.A. MacMillan, et. al., (1974), op. cit.

²See Robert E. Clark, op. cit.; Robert K. Merton and Alice S. Kitt, op. cit.; Clifford T. Paynton, "A suggestion for reference group theory: ideational referents and group referents," *Canadian Review of Social Anthropology* 3 (1966), pp. 214-223.

migrant stock. Initially, however, it will be useful to define what is meant by 'mass media.' In its popular usage the term refers to television, radio, motion pictures, newspapers and magazines. However, as C. Wright¹ is careful to note, the employment of a mechanized instrument does not necessarily signify mass communication:

'To illustrate, a nationwide telecast of a political speech is mass communication; closed-circuit television over which a small group of medical students observe an operation is not. Modern technology, then, appears to be necessary but not sufficient component in defining mass communication, which is distinguishable also by the nature of its audience, the communication itself, and the communicator. Mass communication is directed toward relatively large and heterogeneous audiences that are anonymous to the communicator. Messages are transmitted publicly; are timed to reach most of the audience quickly, often simultaneously; and usually are meant to be transient rather than permanent records. Finally, the communicator tends to be, or to operate within, a complex formal organization that may involve great expense.'

Two key criteria of this definition, it would seem, are open access to the medium by the public at large, assuming it possesses the necessary means of 'decoding' the message;² and the existence of a complex formal organization for the purpose of interpreting and disseminating it. Nevertheless, despite Wright's reference to the anonymity of the audience, and notwithstanding mass media's 'mechanical' function as a one-way communication, there is little doubt over their role as an agent of socialization. Those who argue for the passiveness of mass media due to their unidirectional flow of symbols overlook the fact that content and structure are both shaped by a desire on the part of the owners/operators of the medium to influence. For example, even among state controlled media external influences must be taken into account, even if they are nothing more than the reflection of a political ideology. This fundamental principle has profound implications for the role of mass media. Kurt Lang,³ in a discussion of mass media as the image of society, points out that because the media perspective is shaped by audience considerations, constraints endemic to the work setting, the technology involved, and socio-economic structures, they are also an 'object' of socialization.

¹C. Wright, *Mass Communication: A Sociological Perspective*. (New York: Random House, 1959).

²The mechanisms for decoding mass media messages can range from literacy to the possession of radios and television sets. All mass media messages require some form of decoding.

³Kurt Lang, "Images of society; media research in Germany," *The Public Opinion Quarterly* 38 (1971), pp. 333-351.

C. Source Credibility and Attitude Change

The image of society in mass media reflects and helps shape society's self-image; and like all shared experience this image is a social construction, the "cumulation of continuous communicative acts," as Lang puts it. Nevertheless, there is widespread agreement that a core element of communicatory effectiveness is source credibility.¹ Brian Sternthal, et. al. define this in terms of 'expertise' and trustworthiness.² It may be useful at this stage to have some understanding of how source credibility emerges. Conventional wisdom asserts greater support for a message of persuasion from a high credibility source than from one of low credibility. But this view tends to ignore the process underlying credibility effect. Some early empirical work by C. Hovland, A. Lumsdaine, and F. Sheffield showed that even low credibility sources can exercise persuasion through what has become known as the 'sleeper effect.' Since then there has been sporadic debate among students of mass communication over whether this phenomenon actually exists or whether in fact it is merely a function of the low credibility source becoming more legitimized over time.³ Other researchers who take a jaundiced view of the imperativeness of high credibility argue that the discriminatory function lies not in the source but largely in the actor's predisposition toward the communication.⁴ The work of Sternthal, et. al. suggests interactive effects of both cognitive response and attribution principles. According to this school of thought, cognitive response theory informs the mechanisms by which the actor processes information, irrespective of communication source credibility. Theories of attribution are frequently adopted by communication researchers to explain how reciprocal behavior elicited by the actor affects persuasion and how the actor selects cues for processing. Temporal interaction of source credibility and source introduction has been found to

¹T. Choo, "Communicator credibility and communication discrepancy as determinants of opinion change," *Journal of Social Psychology* 64 (1964), pp. 1–20.; C. Hovland and W. Weiss, "The influence of source credibility on communication effectiveness," *The Public Opinion Quarterly* 15 (1951), pp. 635–650; H. Kelman and C. Hovland, "Reinstatement of the communicator in delayed measurement of opinion," *Journal of Abnormal and Social Psychology* 48 (1953).

²Brian Sternthal, et. al., "The persuasive effect of source credibility: a situational analysis," *The Public Opinion Quarterly* 42 (1978), pp. 285–314.

³C. Hovland, A. Lumsdaine, and F. Sheffield, *Experiments in Mass Communication*. (Princeton, N.J.: Princeton University Press, 1949).

⁴D. Bock and T. Saine, "The impact of source credibility, attitude valence, and task sensitization on trait errors in speech evaluation," *Speech Monographs* 42 (1975), pp. 229–236.

manifest itself in terms of cognitive response. As Sternthal, et. al. put it:

'Persuasion is determined by individuals' cognitive reaction to the message, which is a constant across credibility treatments. As a result, credibility is expected to have no effect on persuasion. This prediction is confirmed in studies where the timing of the source's identification was manipulated.'

They also note the interactive effects of message variables and source credibility. The latter, they claim, has a systematic effect for messages. The strength of situational cues and the social psychological differences of actors are reliable variables in predicting the persuasive impact of a communication.

Nevertheless, cognitive response theories do not appear to adequately explain all mechanisms of persuasion, and in particular those deriving from socialization. They identify initial opinion as a 'driving force' of persuasion but fail to address causal factors. Attribution theory suggests that actors become aware of their attitudes by inferring them from their own behavior in concert with the situational context within which the behavior occurs. It will be recalled that attribution theory originated with Fritz Heider's efforts to formulate principles of 'naive psychology.' The conceptual core of this perspective is the notion of causal attribution; in other words, the impulse to attribute social processes to central unitary modules rather than to the social context or to mediating processes. In social interaction this principle acts to encode incoming messages in terms of the motives and sentiments of other actors.

Information search has been examined by Kelley, Heider, and others from the standpoint of attribution theory. However, little progress has been made towards reconciling the epistemological gap between causal explanation and the socializing influence of mass media. E.E. Jones and J.W. Thibaut¹ modified the perspective somewhat in crediting the actor with a more active and discriminating part in defining his situation, particularly with respect to goal attainment. They argue that it would be difficult for an actor to maintain either a causal 'genetic' (employing generalizations from other's past interaction mediated by some preferred personality conception) or 'situation-matching' (evaluating other's behavior in terms of the relevant situational norms) set when an interaction situation is characterized by a high degree of mutual contingency. In such situations the actor would be inclined to reinforce those acts of others which would

¹E.E. Jones and J.W. Thibaut, "Interaction Goals as Bases of Inference in Interpersonal Perception," in *Person Perception and Interpersonal Behavior*, eds. R. Taguri and L. Petrullo. (Palo Alto, Cal.: Stanford University Press, 1958).

result in beneficial consequences for him. Attribution theory, of course, asserts that these acts are defined by the actors themselves. But R.F. Bales¹ maintains that they are role functional. Symbolic meanings of action, he claims, should be understood in terms of the group's social action. This supports Jones and Thibaut's view that coping with the environment involves much more than mirroring it. Even Sternthal, et. al., who demonstrate a strong attribution bias in their work, agree that information credibility is essentially a product of the articulation between message content and the contextual situation.

D. The Interpersonal Context of Mass Communication

The utilization of mass media is commonly conceived of as a distinctly individual behavior. However, this conception is seen as far too narrow by many researchers.² To begin with, humans are socializing animals, which means that they usually absorb mass media messages as a social group. More importantly, the mass media messages function as a catalyst to that social interaction, stimulating interpersonal communication. Thus, mass media have a social, as well as a socializing, role. Indeed, it has been claimed that neither mass communication nor interpersonal processes can be properly understood without reference to one another.³ Nevertheless, interpersonal discussion emerges, via mass media, during information search. Therefore, despite Marshall McLuhan's claim that 'the medium is the message,' mass media must be viewed as an intervening variable in this process.

These comments and empirical findings would appear to support the argument being made here that mass media can be viewed as valid reference others. Their salience is largely a product of the technology involved in delivering the message. Because they disseminate information among a disaggregated audience from a relatively concentrated physical and intellectual source, mass media are able to pursue the role of information

¹R.F. Bales, *Personality and Interpersonal Behavior*. (New York: Henry Holt and Company, 1970).

²See, for example, Steven H. Chaffee, "The Interpersonal Context of Mass Communication," in *Current Perspectives in Mass Communication*. eds. F. Gerald Kline and Phillip J. Tichener. (Beverly Hills, Cal: Sage Publications, 1972).

³E. Katz, "Communication research and the image of society: convergence of two traditions," *American Journal of sociology* 65 (1959), pp. 435-440.

gatekeeper. This role, in concert with the state of technology, demands attention if not unreserved respect from the audience. Whatever respect mass media are able to garner seems to be more function of 'perceived power' – the power held by an information gatekeeper. People come to expect mass media to develop social roles compatible with the position they hold in society. In turn, these roles are reinforced by the manipulators of mass media; thus, a given medium may be identified with, and its messages interpreted in terms of, the social role(s) in which it has been cast. To the extent that these roles are fulfilled, then, mass media appear to function as a frame of reference for their audience. From the standpoint of type, they correspond rather closely to what Theodore Kemper¹ refers to as an 'audience group.' These are reference others which demand neither normative nor value-validating behavior from the actor, and they do not serve as frames of reference in the manner of comparison reference others. The actor attributes certain values to an audience group and will often use its values or example as a guide to his own behavior. One of the principle distinguishing features of an audience group is that the actor does not have direct access to it; consequently, it is not directly affected by the actor's reaction to its message. This probably works to enhance what Mark Alpert and W. Thomas Anderson Jr.² describe as 'optimal heterophily' in the source-receiver relationship. Under these conditions the source of information (mass media) is sufficiently dissimilar to the receiver in terms of prestige and socioeconomic attributes as to create a more effective communication.

E. Differential Receiver Characteristics

It was pointed out in the previous section that utilization of migrant stocks by prospective migrants tends to be discriminated on the basis of socioeconomic attributes. Empirical research indicates similar patterns in the utilization of mass media, particularly with respect to job search. Sheppard and Belitsky, for example, found that newspaper advertisements were the second most commonly used source of information (after

¹Theodore Kemper, "Reference groups, socialization and achievement," *American Sociological Review* 33 (1968), pp. 31-45.

²Mark I. Alpert and W. Thomas Anderson, Jr., "Optimal heterophily and communication effectiveness: some empirical findings," *The Journal of Communication* 23 (1973), pp. 328-343.

migrant stock) about job opportunities by male blue-collar workers. But again there were marked differences among skill levels. Generally, better skilled workers were more inclined to use this source than the less skilled. Similar relationships were found in the utilization of radio. In some earlier work George Stigler¹ found much the same phenomenon.

Interestingly, the mass media themselves seem to be differentially utilized by specific socioeconomic, racial, and ethnic groups. In fact, considerable attention has been paid to this aspect of mass medium consumption. A study of the role of mass media among the urban poor in the Lansing, Michigan area revealed that while low income blacks preferred to keep abreast of current events by means of face-to-face interaction, low income whites selected television as their preferred medium. Television enjoyed the highest popularity of all mass media alternatives, regardless of receiver differences. The salience of this medium among the poor has been widely documented throughout western Europe and North America.² Issues of literacy are obviously relevant to media preferences although, curiously, an extensive treatment of this subject by Bradley Greenburg and Brenda Dervin³ fails to even acknowledge this fact. The preferences among blacks for interpersonal communication probably also reflects white bias in electronic media content.

Conceptually then, mass media appear to qualify as a special type of 'audience' reference other. As objects of socialization mass media systems generate salience in the process of socializing their audience. But while the relationship between actor and reference other is recursive, it tends to be indirect. Empirical research also supports the argument presented here that mass media are utilized in job search behavior, specifically in terms of socio-economic attributes and in terms of the media utilized. The important question remaining to be answered is whether mass media function as a surrogate for migrant stocks in the context of migration to SRICs. This question and its logical corollaries provide a framework for the following propositions:

¹George J. Stigler, "Information in the labor market," *Journal of Political Economy* 70 (1962), pp. 94-105.

²See James W. Carey, "Variations in Negro/White television preferences," *Journal of Broadcasting* 10 (1966), pp. 199-211; Leslie W. Sargent and Guido H. Stempel, "Poverty, alienation, and mass media use," *Journalism Quarterly* 45 (1968), pp. 324-326.

³Bradley Greenburg and Brenda Dervin, "Mass communication among the urban poor," *The Public Opinion Quarterly* 34 (1970), pp. 224-235.

1. That the significance of a migrant stock as a source of job-search information for prospective migrants will vary systematically with the community's stage of development. Specifically, newer SRICs will be found to have lower levels of migrant stock than older communities.
2. That the utilization of a migrant stock, where it is found to be operative, will be discriminated on the basis of education and/or occupation characteristics. Specifically: a. there will be a greater tendency for less skilled occupations to utilize a migrant stock in their information search behavior than the more highly skilled; b. professional and other highly skilled white-collar categories will not be expected to utilize a migrant stock in the job search.
3. That mass media will be found to function as a surrogate for migrant stocks in instances where the latter are not operative.
4. That the type of mass media utilized during information search will be discriminated on the basis of education and occupation characteristics. Specifically: a higher proportion among the less skilled occupations will be found to utilize the electronic media (radio and television), than the more highly skilled, who will be more likely to favor the print media.

F. Information Source and Post-Decision Satisfaction

The type and scope of reference others were discussed in Chapter Three. Building upon these theoretical underpinnings it was noted in this chapter that migrant stocks appear to incorporate both a normative and a comparative reference function. Researchers have documented the normative function, albeit implicitly, when migrants are reunited with friends and relatives at destination.¹ It will be recalled that Choldin,² in his study of kinship networks in the migration process, found friends and relatives at destination assisting the incoming migrant to "confront the problems of settlement and adjustment; in providing material necessities, in establishing new social connections and in maintaining morale." It

¹See, for example, Eugene Litwak, "Geographical mobility and extended family cohesion," *American Sociological Review* 25 (1960) pp. 385-394; Ted Jitodai, "Migration and kinship contracts," *Pacific Sociological Review* 6 (1963), pp. 49-55.

²Harvey M. Choldin, op. cit.

seems, however, that migrant stocks are not especially successful in the matter of morale; contrary to popular assumption Choldin found a negative relationship between utilization of a migrant stock and the migrant's satisfaction with his decision to move. Moreover, migrants who did not utilize a migrant stock tended to find jobs more quickly than those who did.

Choldin attributes these findings to the possibility that a migrant stock hinders the migrant's attempts to sever attachments to community of origin. As a constant reminder of 'home,' friends and relatives effectively block assimilation into the new environment. This is a plausible explanation under certain conditions but two important factors must surely intervene in the phenomenon. The first derives from socioeconomic differences among migrants, while the second relates to length of residence in the community. As pointed out earlier, there is some agreement in the empirical literature that education/occupational levels mediate the extent of both emotional and material attachment to family and close friends.¹ This in turn has been interpreted in terms of 'psychic cost.' So there seems to be a likelihood of education and its operationalised counterpart, occupation, intervening in the affinal relationship between the migrant and the migrant stock. To begin with, those with higher skills would be expected to find work more easily than the unskilled or semi-skilled. Secondly, their utilization of a migrant stock would probably be much less of a 'dependent' nature and more confined to social attachments. The temporal ramifications of residency involve a rationalization process which tends to accompany all decision-making. Moreover, satisfaction with the decision to move should increase with length of residence, simply because those who are highly dissatisfied with their decision are likely to move again within a short space of time. Thus, based on the foregoing discussion, the following propositions can be formulated for those who utilize a migrant stock in their information search behavior:

- 1. That, *ceteris paribus*, there will be a positive relationship between satisfaction with the decision to move and occupational/educational skill levels.
- 2. That length of residence will be found to intervene in levels of expressed satisfaction with the decision to move. Specifically, satisfaction will increase with

¹See M.J. Greenwood, "Research on internal migration in the United States: a survey," *Journal Economic Literature* 13 (1975), pp. 397-433; Aba Schwartz, op. cit.; Charles Tilly and C. Harold Brown, "On uprooting, kinship, and the auspices of migration," *International Journal of Comparative Sociology* 8 (1967), pp. 139-164.

length of residence, irrespective of migrant characteristics.

The next issue of importance concerns the implications of mass media utilization for levels of satisfaction with the decision to move. Since mass media possess at best only a comparative reference influence they are likely to have very little impact upon the migrant following arrival at destination. Mass media do not generate affinal or contractual ties, and therefore would not be expected to circumscribe the migrant's behavior. At the same time mass media are unable to provide emotional or material support for the migrant; once the latter has made a decision to move, he is on his own from the standpoint of post decision confirmation. Consequently, it seems reasonable to assume that those utilizing mass media as a surrogate for migrant stock will be significantly less influenced by these sources following arrival at destination. In this event, what effect will the absence of normative influence have upon post decision satisfaction? If migrant stocks do indeed tend to reduce morale among those migrants who utilize them as reference others, it follows that an absence of what is probably a 'compliant' type of normative influence will have a relatively beneficial effect upon the migrant. In a more pragmatic sense migrants would be less influenced, for better or for worse, by mass media reference others after the decision to move has been made than those who utilize migrant stocks. Logically, then, morale would be expected to show higher levels, along with correspondingly higher levels of post decision satisfaction. It also follows that this relationship cuts across occupational/educational skill levels and therefore no within-group variation should be found. Again, however, length of residence would be expected to intervene in any post decision rationalization process. These expected relationships may be expressed in the following propositions:

1. That, *ceteris paribus*, migrants utilizing mass media as a surrogate for migrant stocks will express greater satisfaction with their decision to move than those utilizing migrant stocks, regardless of occupation/educational skill levels.
2. That length of residence will intervene in this relationship when introduced as a control variable. Specifically, there will be a positive relationship between length of residence and satisfaction with the decision to move, regardless of migrant characteristics.

G. Employment Networks as Reference Others

Sheppard and Belitsky,¹ George Stigler,² Marvin Sussman³ and others have noted significant differences in job search patterns among occupational groups. As previously discussed, migratory blue-collar workers are seldom hired prior to moving, although this characteristic must be mediated by geographic distance moved and by within-group skill levels. Nevertheless, the type of information they seek and the source of information utilized tend to differ from skilled and professional white-collar occupations. It has already been noted that blue-collar workers, particularly the less skilled are more disposed toward utilizing friends and relatives at destination as an information source. Moreover, the job-related information they seek is much more oriented toward the 'job climate' at destination, rather than a specific job. Obviously, this stems in large part from the fact that most, although not all, blue-collar workers are hired at the site office or factory gate, and as a consequence are usually obliged to make their own way at their own expense and more or less on speculation to the place of hiring. For their part, employers do not normally find it economically feasible to implement sophisticated hiring practices for trades occupations, and especially for the less skilled. However, some employers do undertake recruiting campaigns in attempts to attract workers to less attractive locations. SRICs are common examples. Unions are instrumental in referring their members to locations where their skills may be in demand. But the effectiveness of union referrals appears to decline with geographic distance and union halls tend to be located only in large urban centers. Moreover, it should be noted that a significant proportion of SRIC-based employers are not unionized; nor do they welcome the idea.

Albert Rees⁴ has divided employment-related information networks into two groups: the formal, which includes government employment services, private fee-charging employment agencies, newspaper and professional/technical journal advertisements, union hiring halls, and school or college placement bureaux; and the informal, which includes referrals from employers, tips passed along by friends and

¹Harold L. Sheppard and A. Harvey Belitsky, op. cit.

²George J. Stigler, op. cit.

³Marvin B. Sussman, "The help patterns in the middle class family," *The American Sociological Review* 18 (1953), pp. 22-28.

⁴Albert Rees, "Information Networks in Labor Markets," in *Readings in Labor Market Analysis*, eds. John F. Burton, Jr., Lee K. Benham, William M. Vaughn 111, and Robert J. Flanigan. (New York: Holt, Rinehart and Winston, Inc., 1971).

relatives, 'wide-ranging,' 'walk-ins,' and hiring at the gate. Rees notes that most employers have a strong preference for using informal information networks. Employee referrals incorporate their own screening mechanisms, since incumbent employees of companies tend to refer people like themselves, a phenomenon that Ethan Singer and Leland Wooten¹ describe as the 'doppelganger effect.' There are other reasons:

'Informal sources also tend to provide applications from the neighborhood in which the establishment is located; this is particularly important for female employees in reducing turnover, absenteeism, and tardiness resulting from transportation difficulties. Moreover, informal channels are usually costless to the employer, though we have found a few cases in which bonuses are paid for employee referrals that result in hires.'

While informal sources may indeed be preferred over the formal, there is strong evidence that migratory white-collar workers with management, technical, or professional skills tend to obtain jobs prior to moving. The implication here is that the degree of formality among information sources is less important as a subject of investigation than the mechanisms of obtaining a job prior to moving. For these reasons it is argued here that employment networks may be considered as valid reference others for these types of white-collar workers in their information search behaviors. The task of defining this reference relationship has generated a good deal of polemic. Schmitt seems to regard it in terms of reference 'category.' This is a "social or statistical category that is extending an influence over ego."² Social categories are individuals who have some characteristics in common, from which a 'consciousness of kind' arises. Statistical categories, which appear to be most relevant to this situation, have characteristics in common, but without a consciousness of kind. They are, in fact, loose associations which become salient to the actor by virtue of his training, occupation, and job search behavior. Their comparative function is readily apparent, but the power of professional associations and even employment agencies to apply sanctions cannot be ignored. Schmitt discusses the issue of membership in reference other relationships. Following Merton, he defines membership if the actor: a. interacts with the group, or b. defines himself as a member of the group, or c. is defined by others as a member of the group. It seems axiomatic that a normative function can only emerge with membership, although

¹Ethan A. Singer and Leland M. Wooton, "The triumph and failure of Albert Speer's administrative genius: Implications for current management theory and practice," *Journal of Applied Behavioral Science* 12 (1976), pp. 79-101.

²Raymond L. Schmitt, op. cit., p. 54.

this assumption, as previously pointed out, has been challenged. Perhaps most importantly, while employment networks may be linked by several functional elements, they are considerably more specified from the standpoint of the actor.

This view does have its detractors. David Holden¹ is critical of attempts to qualify associations as reference others on the grounds that their referent function is too diffuse to exert any meaningful effect. His study of the perceived salience of several rural based organizations showed very little homogeneity among respondents and insignificant discrimination between experimental and 'control' organizations. However, Holden's work can be criticised on the basis of his methodology and his underlying assumptions. To begin with, his conceptual point of departure is restricted to a normative type of influence, which biases his findings to the point where they become self-fulfilling prophesies. Secondly, he fails to take account of the purposive-nature affiliation with reference others. The actor cannot be realistically viewed as a passive recipient of social influence, and in the most idealized reference relationship there is a weighing of costs and benefits, even if the 'cost' is in terms of self image. For this reason all reference relationships tend to be situation-specific, achieving salience in the context of sometimes single issues and often at a single point of time.

Employment Networks and Occupational Socialization

While information search is an irregular phenomenon in a specific purposive sense, it does display elements of continuity when viewed as part of the work experience. Employment networks must be understood as a corollary of occupational socialization. This interrelation may be examined from the standpoint of formal training situations and in the later performance of occupations. Ronald Pavalko² believes that this type of socialization may be intended or unconscious, implicit or explicit. Technical and professional socialization appears to follow a series of predictable sequences:

1. A substantial number of people, doing full-time, some activity that needs doing.
2. A training school is established.
3. A professional association is formed.

¹David E.W. Holden, "Associations as reference groups: an approach to the problem," *Rural Sociology* 30 (1965), pp. 63-74.

²Ronald M. Pavalko, *Sociology of Occupations and Professions*. (Itasca Illinois: F.E. Peacock Publishers, Inc., 1971), Chap. 4.

4. The association engages in political agitation to win the support of law for the protection of the group.
5. A code of ethics is developed.¹

Thus, an actor's occupation in no small way influences the content and composition of his professional network. As Jeremy Boissevain² points out in his treatment of social networks, an actor's economic role set—members of his network who became salient as a function of his own role(s)—are an important part of his network. Pavalko describes these relationships as 'anticipatory' socialization. As Mead pointed out many years ago, humans have a unique ability to manipulate symbols, and are therefore able to anticipate the benefits (or otherwise) of subscribing to a particular group. Indeed, Pavalko explicitly examines these issues from the perspectives of role occupancy and the reference other relationship.

'The implication (here) is that the learning of occupational roles, the development of work styles, and the development of a new self concept are the outcome of interaction with significant others in the training milieu.'³

Employment networks, it may be argued, are an integral part of the professional's economic and social environment. He helps shape them into mutually congruent terms of reference, which in turn serve to reinforce his role relationship with the network. As sources of information in the job search process, these networks will guide his search behavior, prescribing suitable wage thresholds and acceptable parameters for his occupational mobility. Based on this discussion, then, it is suggested that the patterns of information search among managerial, technical, and professional migrants to SRICs will differ significantly from blue-collar migrants to these communities. The following propositions are presented:

1. That skilled and professional white-collar migrants to SRICs will be more likely to have obtained jobs (inclusive of company transfers) prior to moving than their blue-collar counterparts.
2. That skilled and professional white-collar migrants to SRICs will be more likely to utilize employment networks in the job search process than their blue-collar counterparts.

¹Ibid., p. 29.

²Jeremy Boissevain, *Friends of Friends: Networks, Manipulators, and Coalitions..* (Oxford, U.K.: Basil Blackwell, 1974), pp. 83-89.

³Ronald M. Pavalko, op. cit., p. 88.

3. That levels of satisfaction with the decision to move will be generally higher among skilled professional white-collar migrants than levels generally expressed by blue-collar migrants.
4. That length of residence will be found to specify levels of expressed satisfaction with the decision to move. Specifically, there will be a positive relationship between levels of satisfaction and length of residence, regardless of occupational differences.

H. Summary of the Theoretical Propositions

Group 1: Migrant Stocks

1. That the significance of a migrant stock as a source of job-search information for prospective migrants will vary systematically with the community's stage of development. Specifically, newer SRICs will be found to have lower levels of migrant stock than older communities.

That the utilization of a migrant stock, where it is found to be operative, will be discriminated on the basis of education and/or occupation characteristics. Specifically: a. there will be a greater tendency for less skilled occupations to utilize a migrant stock in their information search behavior than the more highly skilled; b. professional and other highly skilled white-collar categories will not be expected to utilize a migrant stock in the job search.

3. That mass media will be found to function as a surrogate for migrant stocks in instances where the latter are not operative.
4. That the type of mass media utilized during information search will be discriminated on the basis of education and/or occupation characteristics. Specifically, a higher proportion among the less skilled occupations will be found to utilize the electronic media (radio and television) than the more highly skilled, who will be more likely to favor the print media.

Group 2: Information Source and Post-Decision Satisfaction

1. That, ceteris paribus, there will be a positive relationship between satisfaction with the decision to move and occupational/educational skill levels.

That length of residence will be found to intervene in levels of expressed

satisfaction with the decision to move. Specifically, satisfaction will increase with length of residence, irrespective of migrant characteristics.

Group 3: Mass Media Utilization

1. That, *ceteris paribus*, migrants utilizing mass media as a surrogate for migrant stocks will express greater satisfaction with their decision to move than those utilizing migrant stocks, regardless of occupational/educational skill levels.
2. That length of residence will intervene in this relationship when introduced as a control variable. Specifically, there will be a positive relationship between length of residence and satisfaction with the decision to move, regardless of migrant characteristics.

Group 4: Employment Networks

1. That skilled and professional white-collar migrants to SRICs will be more likely to have obtained jobs (inclusive of company transfers) prior to moving than their blue-collar counterparts.
2. That skilled and professional white-collar migrants to SRICs will be more likely to utilize employment networks in the job search process than their blue-collar counterparts.
3. That levels of satisfaction with the decision to move will be generally higher among skilled and professional white-collar migrants than levels generally expressed by blue-collar migrants.
4. That length of residence will be found to specify levels of expressed satisfaction with the decision to move. Specifically, there will be a positive relationship between levels of satisfaction and length of residence, regardless of occupational differences among groups.

The operationalization of these propositions into testable hypotheses, development of the survey instrument and the sampling methodology will be discussed in the following chapter.

V. METHODOLOGY

A. The Sampling Frame

An interesting but potentially troublesome characteristic of single resource industry communities is that their demographic and socioeconomic features reflect rather distinct stages of their evolution. This presents students of migration to SRICs with a number of methodological problems, not the least of which involves the task of actually operationalizing the concept of migration. The start-up phase of an SRIC attracts a high proportion of workers employed by contractors to construct the physical plant. In that capacity they do not work for the resource developer and usually move on to other construction sites once their respective tasks have been completed. For example, most of the skilled workforce contracted by BCFP (British Columbia Forest Products) to build their new plant just outside Grande Cache were on the payroll of Foothills Construction Ltd., of Calgary. Many had come from Vancouver and were scheduled to return there once the job was finished.

This, of course, is an itinerant workforce and as such can hardly be described as 'migration' by common definition. But if ignored it could lead the researcher to build a body of empirical evidence upon a largely evanescent data base. It is one thing to study itinerant labor, and another to study migration, since the latter presupposes an intent (if not actually realized) to establish permanent residence at destination. The researcher can never be fully confident that a sample of individuals in an SRIC are in fact "migrants". However, recognition of the community's temporal stage of development will undoubtedly influence this probability. Sampling methodologies related to the unit of analysis will in turn affect external (content) validity. These considerations are directly linked to issues of generalizability. In the matter of SRICs, two questions may be asked: to what extent does the community being studied represent the universe of SRICs? And to what extent are those respondents sampled representative of an SRIC workforce? SRICs are obviously not the same the world over, or even within Canada. They differ on the basis of industry, population size, degree of geographic isolation, state of development, and in terms of their role within a given socioeconomic system. The extent to which these differences affect the characteristics of those who go to work in them is

open to debate.

Budget Limitations: Selection of a sampling frame for this study was largely dictated by budget considerations. For this reason the study examines migration to SRICs only within the province of Alberta. Nevertheless, the decision is defensible in that Alberta contains some of Canada's most important deposits of finite resources. New technologies, coupled with this country's goal of energy self-sufficiency, have fostered substantial in-migration as a response to accelerated manpower requirements. Thus it may be claimed that Alberta SRICs are, at the least, no less representative than those elsewhere in the country. More important, perhaps, is that they are highly representative of strategies aimed at permanent settlement. As such they stand in rather sharp contrast to similar communities of the far north, which are predicated much more extensively on an itinerant workforce and a remittance paycheck.

SRICs in Alberta: Single resource industry communities are not a recent phenomenon in Alberta. Coal extraction and the marketing of forest products share a long history in population centers of this type. With the discovery of light crude oil, the importance of coal to Alberta's economy declined but never completely died. Recently, increased world demand for coal, particularly as an alternative to oil, has created something of a renaissance in the coal industry. The exploitation of oil and natural gas deposits has also accelerated during the past decade, largely as a result of the provincial government's attempts to foster economic diversification. Much of Alberta's present population boom is related to the energy industry, and the 'new era' of SRICs in this province are based on these resources. While a large proportion are located in the northern half of the province, recent discoveries of natural gas are creating SRICs in selected areas of the south. Not all these communities are 'new' in terms of resource exploitation. Indeed, a large proportion pre-existed as agricultural service centers or truck stops and were simply 'adopted' by the adjacent resource development.

Selection Rationale: Selection of the sample communities was based on two criteria: 1. Their representativeness of SRICs in Alberta, and 2. Their age. Since the exploitation of fossil fuels constitutes the economic base of most, although not all, SRICs in this province, they were the obvious choice in the selection process. It was also decided to restrict selection to SRICs that were in a post start-up phase of their evolution. Once the

physical plant has been built and the product on stream, resource developers usually seek to stabilize their permanent workforce. This increases the probability that respondents would be permanent residents, rather than itinerant employees.

Theoretical propositions outlined in the previous chapter dictated a multiple community sample. This was necessary to facilitate testing of several hypotheses relating to the selection of mass media as a surrogate for migrant stock. Final election of the sample communities was based on their 'representativeness' in terms of the eligibility criteria. This admittedly was an arbitrary assessment but one which appeared appropriate under the circumstances. Four communities were selected which represented something of a continuum in terms of their evolution. There are essentially two criteria for determining a community's age. The first would simply set the datum at its founding or legal incorporation. However, this strategy could be meaningless in the context of in-migration, particularly if the community in question existed prior to its more recent role as a single resource industry town. Determining the presence of a migrant stock within such an economic framework presupposes an influx of migrants, and this would normally only occur under conditions created by a new industry. An alternative, and one adopted for this study, was to determine population gains since 1976 as a proportion of growth since 1971. Most recent population figures were taken as of June, 1981.¹ While these calculations do not indicate 'newness' in terms of the physical community, they do suggest newness in population. Table 5.1 gives the populations for four Alberta communities at the three time periods, together with proportional gains made since 1976.

Rainbow Lake clearly has made the highest proportional gain of the four sample communities. It is followed, in descending order, by Swan Hills, Fox Creek, and Grande Cache. All but Grande Cache are involved in oil and natural gas exploration; Grande Cache is largely dependent upon coal extraction. All communities lie northwest of Alberta's capital city, Edmonton, and while they vary in degrees of geographic isolation, all have direct access to major arterial highways.

The Community of Fox Creek: Lying approximately 250 kilometers north west of

¹Official Population List, 1981. Department of Municipal Affairs, Government of Alberta.

Table 5.1

Population Gains Made Since 1976 as a Proportion of Overall Growth During the Period
1971 to 1981 for the Four Sample Communities

Community	Population Census Years			% Gain Since 1976
	1971	1976	1981	
Fox Creek	1,281	1,625	1,905	39
Grande Cache	3,417	4,172	4,423	25
Rainbow Lake	355	434	753	80
Swan Hills	1,376	2,012	2,473	42

Edmonton, Fox Creek is a long established community which still serves the area's farm population. Present population stands at 1,905. It is somewhat atypical of the four cases in that none of the developers presently exploiting local oil and gas fields have located their offices in the town. Instead they are located at the plant sites scattered about the vicinity. Consequently, Fox Creek's labor force shows substantial disaggregation. Amoco Canada, Chevron Standard, Hudson's Bay Oil and Gas, and PetroCan are among the major employers operating in the area. The community is located on Highway 43, a major artery that joins the Manning Highway to the Northwest Territories. Retail and service infrastructures are fairly well developed by comparison to Rainbow Lake and Swan Hills, but are less developed than those of Grande Cache.

The Community of Grande Cache: This community of approximately 4,400 people has been shrouded in controversy since it became targeted as the site of East Slope coal exploration in the early 1960s. Like many SRICs Grande Cache has had its share of booms and busts and its population dynamics tend to reflect these economic realities. The community pre-existed as a Metis settlement. Plans for extensive coal exploitation were accompanied by promises of a bright future for local inhabitants. Initially, neither came to fruition and the Metis now live a marginal existence at Susa Creek, just beyond the town's corporate limits. Only a small proportion find steady employment in the major industry. Not surprisingly, Grande Cache has been a much studied community by social scientists.

While not one of the more isolated communities in terms of geographic distance from other population centers, Grande Cache shares a characteristic common to many SRICs in being located at the terminus of a dead-end highway. The absence of through traffic tends to heighten the sense of isolation and of course it adds considerably to the local cost of living. Lying 433 kilometers north west of Edmonton the town enjoys an aspect over Willmore Wilderness Park and some of the economic benefits of related tourism. Access to other population centers is via Highway 40 which connects with the interprovincial Yellowhead Highway. The major employer, McIntyre Mines, has a sub-surface operation located several kilometers west of the townsite. A fleet of company-owned buses shuttles the workshifts to and from the mine. Another industry, British Columbia Forest Products (BCFP), was constructing a new processing plant east of the community at the time of this study (summer, 1981). Aside from promising additional jobs it will, at least by definition, render Grande Cache ineligible for consideration as an SRIC.

Accommodation in the community is well-developed, with a mix of permanent housing units and two large trailer parks. Both McIntyre and BCFP provide housing for their employees and many are being built in new sub-divisions close to the town's retail core. There is fairly good provision of retail and service facilities and schools. But good recreation, and particularly entertainment, facilities are lacking.

The Community of Rainbow Lake: Although the 'newest' of the four sample communities, a settlement pre-dates more recent natural gas development. A 'new town' of Rainbow Lake was legally created in 1977. Located approximately 900 kilometers north west of Edmonton, it is the most geographically remote of all the sample communities. The nearest population center is High Level, 138 kilometers to the east. physical infrastructure is weak, with most community services being provided by the (then) major employer, Aquitane Company of Canada. The fact that it has no surrounding agricultural hinterland, and consequently has no central place function, tends to exacerbate this problem. Housing is provided by the company, although mobile homes are a more ubiquitous form of accommodation among the less skilled and in particular, those employed by the oil patch contractors. A small hotel (with cafeteria and beer parlor), post office, grocery and hardware store comprise the town's retail sector. At the time of this

study the major employer was subsidizing the operation of a community television antenna, play school, and scheduled flights to Edmonton via Time Air. Aquitane had also underwritten the cost of paving some of the community's internal roads. In the summer of 1981 the town's population stood at 753.

The Community of Swan Hills: Another pre-existent community, Swan Hills serves as the center for oil and natural gas in the Swan Hills fields. Lying approximately 210 kilometers north west of Edmonton it is accessed by Highways 32 and 33, both of which connect with the Slave Lake region farther north. A 'new town' of Swan Hills was legally incorporated in 1977. The community is located in densely forested land and has subsequently experienced the threat of major forest fires. Key employers include Amoco Canada, Esso Resources, Federated Pipeline, Home Oil, and Shell Canada. The largest, Esso, has located its offices at the plant site near Judy Creek, halfway between Swan Hills and Whitecourt. Shell has also combined its administrative offices with its processing plant. Three major companies have their offices located in the townsite.

Retail and service facilities in Swan Hills are only fair. Whitecourt serves as an alternative for certain needs, but access by way of Highway 32 is rough, dusty, and often treacherous during summer and frequently snowbound in winter. Although the community has grown rapidly in recent years, there is little doubt that Whitecourt has effectively competed for Swan Hills' population and physical infrastructure. Present population stands at 2,473. The major employers provide housing in Swan Hills for nearly all their employees; those employed by Amoco, for example, at the time of this study were paying only \$75.00 a month for their accommodation. There are several subdivisions of permanent housing, one dating back to the early 1960s. Two large trailer parks are located near the townsite. Like all communities based on gas and oil, Swan Hills tends to be rather fragmented in terms of its spatial activities with workers scattered all over the gas fields. Shiftwork contributes to a reduced sense of physical community. Recreational and entertainment facilities, particularly for young children and juveniles, are extremely poor.

Locations of the four sample communities, together with their access highways and closest population centers, are shown in Figure 5.1.

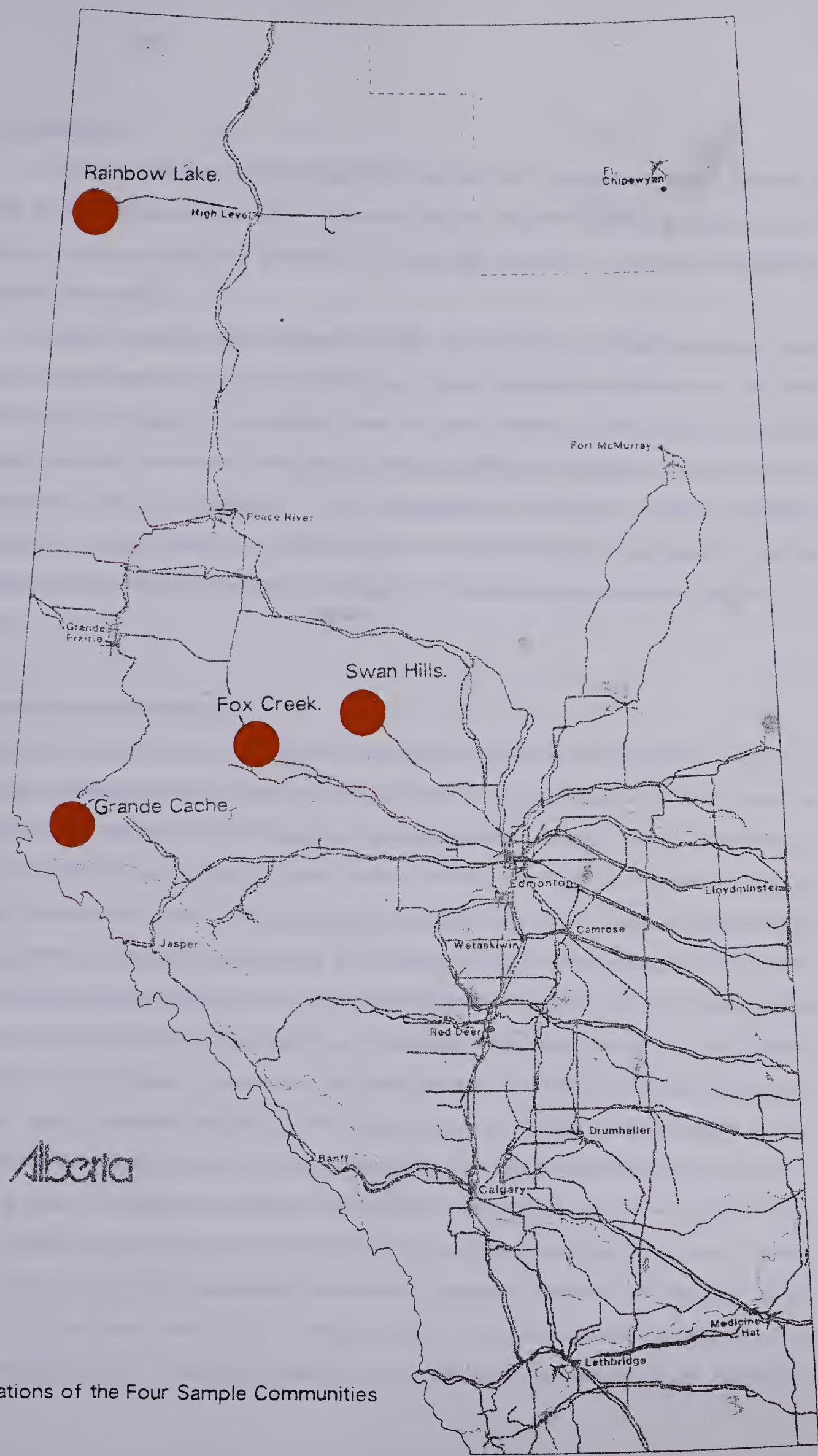


Figure V.1 Locations of the Four Sample Communities

B. The Sample

It has already been emphasized that this is not a community study. Rather, its focus is upon migration to SRICs in Alberta, with the migrant representing the focus of analysis. Data gathering was achieved by sampling migrants to the four communities previously described.

Ideally, inferential data analysis requires some form of probability sample, which in turn presupposes a degree of randomness. Random sampling operates upon the basic criterion that all cases in a population have an equal chance of being selected, an ideal seldom achieved in the real world. Above all else, SRICs are characterized by transient populations and it is difficult, if not impossible, to ascertain precise population parameters at any given time. Conventional forms of access to populations, such as telephone directories and tax rolls, are largely ineffective because they are quickly out of date.

C. Sampling Methodology

Several conceptual issues prohibited the adoption of simple random sampling, even if this had been possible in the first place. To begin with, only those who were in-migrants (as opposed to those who were indigenous to the immediate vicinity) had any relevance to the study. Secondly, in order to yield useful information these in-migrants had to be actively employed. Thirdly, sampling had to be conducted in four separate communities. These factors dictated something of a clustered random sampling procedure and one which would reduce costly and time-wasting ineligibility among prospective respondents.

Sampling Methodology: Two options presented themselves in terms of sampling strategy. The first was to generate a geographic sampling frame, selecting residences on some type of random procedure. The second was to directly sample people at their place of work. There were two major drawbacks with the first alternative. Firstly, there was a need to screen out ineligible respondents; sampling places of residence would have made this task difficult and wasteful of time and materials. Secondly there is always a problem of delimiting geographic parameters, particularly in small communities of this type. On the other hand such a strategy would have given almost everyone in the community a more or less equal chance of being selected. The second option enabled the

employer to do most of the eligibility screening, thus saving valuable time and money. However, difficulty arises in sampling all employers in the community. It was finally decided to sample through the major employers in each sample community, the assumption being that at the minimum, their employees would be representative of the local workforce. Nevertheless, this methodology imposes an important caveat on conclusions which may be drawn from the data. Moreover, exploratory research suggested that sampling *only* employees of the oil, gas, and coal developers could introduce bias in favor of the more highly skilled respondents. Consequently, sampling was expanded to include each major employer's largest sub-contractors. These firms undertake on-going construction, well drilling, pipe laying, and other related services. This type of work absorbs a higher proportion of unskilled and semi skilled blue-collar labor than the operational workforces of the major industries. Approximately 20 percent of the sampling in each community was confined to these sub contractors. In all cases, employers were asked to select out from their payrolls those who were in-migrants. This term was defined as employees who had indicated immediately prior residence as outside the sample community and beyond daily commuting range of it. Eligible employees with each firm were all assigned a number. These numbers were then fed into the computer and instructions given for it to randomly extract the quota set for each firm from them. Employees whose I.D. number was selected were administered the questionnaire. No limit was set on length of residence in the community since this would confound attempts to test hypotheses related to the variable.

Sample size was arbitrarily based on 8 percent of the estimated workforce in each sample community. These data were generated from the Government of Alberta's Department of Tourism and Small Business. The resulting total sample size of 500 breaks down as follows:

Fox Creek	104
Grande Cache	220
Rainbow Lake	41
Swan Hills	135

D. The Survey Instrument

The survey questionnaire was designed to be self-administered following personal contact with respondents by the researcher. While delivering the questionnaire, its contents were explained and instructions given as to the correct procedure for answering questions. Respondents were asked to complete the instrument in their own time and mail it back to the University of Alberta in the stamped/self addressed envelope provided. While prior research on the personalization of survey delivery tends to be contradictory, A.R. Andreason¹, D.A. Dillman², and D.A. Dillman and J.H. Frey³ have shown that it, and related techniques, can substantially increase mail survey response rates. This seems partly due to a slight sense of 'obligation' introduced into the dyadic situation, and partly to the anonymity assured by permitting the respondent to complete the instrument in his own time. Some research by Seymour Sudman and N. Bradburn⁴ reaches similar conclusions. The interviewing procedure stretched over two months but resulted in approximately 90 percent of the sample being personally contacted. The remainder were contacted through spouse (where applicable) or the respondent's employer. In all cases a covering letter was furnished with the questionnaire.

Format: The questionnaire comprised three sections. The first dealt with socioeconomic and demographic issues; the second elicited attitudes toward aspects of the move, post decision satisfaction, community environment, and the workplace. The third section comprised the MIRO test battery. Each section was color coded for easier handling.

Open Versus Closed Questions: Debate has continued over many years with respect to the issue of using open or closed-ended questions in survey research. Proponents of the former strategy claim that closed ended questions exacerbate response bias by 'suggestion' and also result in a loss of information. Others counter this argument in noting that open-ended questions are usually collapsed in the final analysis and this may result in an even greater loss of information. Coding errors arising from unstandardized responses can often create further difficulties. Paul Lazarsfeld was one of the first to

¹A.R. Andreason, "Personalizing questionnaire correspondence," *Public Opinion Quarterly* 34 (1970), pp. 273-277.

²D.A. Dillman, "Increasing mail questionnaire response in large samples of the general public," *Public Opinion Quarterly* 36 (1972), pp. 254-257.

³D.A. Dillman and J.H. Frey, "Contribution of personalization to mail questionnaire response as an element of a previously tested method," *Journal of Applied Psychology* 59 (1974), pp. 297-301.

⁴S. Sudman and N. Bradburn, *Response Effects in Surveys*. (Chicago: Aldine Press, 1974).

suggest a compromise: that of using the resulting data to develop a set of exhaustive response categories. C.A. Moser and G. Kalton¹ are more recent advocates of this alternative.

However, one aspect of the issue largely ignored by observers is that, properly designed, closed-ended questions permit the researcher to find out precisely what he wants to know. Open-ended questions tend to make the assumption, often poorly founded, that a respondent understands the question in the first place. A closed set of response categories can serve as additional cues to the purpose underlying the question. In other words, if the respondent does not fully understand the question he may be aided by the response alternatives provided. Obviously the importance of question ambiguity depends to a large extent on the kinds of questions being asked; attitudinal questions, for example, are more likely to be misunderstood than those addressing demographic issues. Moreover, a mail out-mail back delivery system provides for no face-to-face contact between researcher and respondent. Any confusion arising from question/questionnaire design is more likely to go unresolved. Methodologies involving personal contact with the respondent, even on a lagged response basis, can overcome these difficulties.

Split ballot comparisons in methodological research have been ambiguous to date. Howard Schuman and Stanley Presser² devised a series of questions for inclusion in a 1977 SRC national telephone survey in the United States. Results showed that a specific response option included in a closed-ended question elicited a proportionately higher rate of selection than the same option volunteered without such cues. According to Schuman and Presser, educational levels accounted for some of the variation, with the less educated showing a tendency to select a specific option in a closed-ended than in an open-ended question. But is the bias created by question design or by education levels? If in fact it is created by the latter, then the effect will be self-compensating. The issue at stake is whether question construction can be considered an independent variable. Much of the evidence to date does not support this. Following Lazarsfeld and his disciples the strategy adopted in this study was to use closed-ended questions

¹C.A. Moser and G. Kalton, *Survey Methods in Social Investigation*. London (UK): Heinemann Company, 1971).

²Howard Schuman and Stanley Presser, "The open and closed question," *American Sociological Review* 44 (1979), pp. 692-712. See also Howard Schuman and Stanley Presser, "Question wording as an independent variable in survey analysis," *Sociological Methods and Research* 6 (1977), pp. 151-170.

throughout, except with respect to variables routinely collected in raw form, such as age and other numerical responses. Categories were modified where necessary following the pretest. Face-to-face contact with most of the respondents also helped to reduce response error simply by being in a position to explain how the questionnaire worked.

Category Construction: Another topic of debate has been the use of dichotomies against forced choice categories. But here again the relevance of this issue depends upon the questions being asked and how they are designed. A high proportion of response bias is caused by 'loading' the question or phrasing it in such a way as to imply an opinion. Careful attention to question wording and shifting interpretive emphasis from the question to response categories can help circumvent some of these potential problems.

A further related issue is that of including 'middle alternatives', particularly among attitudinal questions. Examples include 'don't know', 'not sure', and 'indifferent.' Some methodology researchers claim that most people have an opinion but will often opt for a middle alternative rather than think carefully about the question.¹ In effect they take the easy way out. There is undoubtedly some truth in this claim, since most survey respondents are at best only marginally interested in the instrument they have been asked to complete. Again the decision to include or not to include middle alternatives involves a trade-off of sorts: improved response variation against possible response bias. Schuman and Presser² have suggested the introduction of 'opinion screening filters,' as some social research agencies have done for many years. This strategy simply screens out those who have no opinion/attitude. Schuman and Presser found that the inclusion of a middle alternative in a set of response categories substantially increased its use over such an alternative simply volunteered. Moreover, it reduces efficiency of the data, especially when sample sizes are small. Since the disadvantages of middle alternatives seem to outweigh the advantages, they were not used in this study.

Pretesting the Survey Instrument

A pretest of the questionnaire and MIRO test battery was administered to a random sample of recent in-migrants hired by a local (Edmonton) firm involved in the oil and gas industry (Banister Pipeline Ltd.) The purpose of the pre-test was twofold: 1. To

¹See P.E. Converse, 'Attitudes and non Attitudes; continuation of a Dialogue,' in E.R. Tufte, ed., *The Quantitative Analysis of Social Problems* (Reading, Mass.: Addison-Wesley, 1970).

²Howard Schuman and Stanley Presser, *Op. Cit.*, 1977.

test questionnaire response categories for ambiguities and misunderstandings; 2. To ascertain validity and reliability of the MIRO test battery. Fifty questionnaires were distributed by the company's personnel officer and returned to him in sealed envelopes. Minor modifications were made to parts 1 and 2 of the questionnaire. However, unacceptably high group standard deviations in the test battery suggested problems with the criterions. Several were re-worded with a view to reducing ambiguity, particularly among those relating to employment networks. Some difficulty remained with the employment network construct at the analytical stage. Notwithstanding, discriminant analysis produced good separation of the occupational groups on the basis of the three reference other typologies, although the former had to be re-grouped during final analysis.

E. Data Analysis

There are two analytical chapters. The first generates a socioeconomic, demographic, and attitudinal profile of respondents, while the second operationalizes and tests hypotheses outlined in the previous chapter. Accordingly, relationships noted among variables in the first chapter will not be held to statistical significance, nor will those in the second except where they relate directly to the testing of hypotheses.

The Independent Variables: Several 'independent' variables were incorporated into the descriptive and inferential analyses. Some, all deriving from the related literature, were utilized as predictors in the theoretical models. Key independent variables used in this study include 'Occupation', 'Age of Respondent', 'Length of Residence in the Community', 'Marital Status', 'Sex of Respondent', 'Prior Residence Location', 'Rural-Urban Background', 'Prior Migration Experience', 'Primary Information Source', and 'Community'.

Operationalizing 'Occupation': This variable was determined, *a priori*, to be a major predictor of several relationships associated with the decision to move and levels of post decision satisfaction. It constitutes an integral component in the design and analysis of the MIRO test battery. As a non-generic variable, construction was predicated upon the need for a classificatory system which would relate to occupational descriptions and

skill levels, rather than socioeconomic prestige. Peter Blau and Otis Duncan¹ are among a number of writers who have identified 'collar' occupations. At the broadest level, occupations can be classed as 'blue' and 'white' collar. Thus, those who engage in manual work would be classed as blue-collar while those whose occupations depend more on mental skills would be classed as white-collar. Of course, the vexing question of how to classify 'gray zone' occupations, such as police officer, has never been resolved to the satisfaction of everyone. However, in view of the occupations involved in this study, gray zones were not expected to be a problem. Practically all those sampled were employed, directly or indirectly, in the community's major industry.

The blue and white-collar occupations were each divided into three skill levels as follows:

1. Blue-collar.
 - a. Unskilled blue-collar
 - b. Semi skilled blue-collar
 - c. Skilled blue-collar

1. White-collar.
 - a. Semi skilled white-collar
 - b. Skilled white-collar
 - c. Professional white-collar

While these categories appear rather broad they serve the purpose intended, since analytical procedures did not need to recognize census-type occupational groupings. Nevertheless, the terms of reference for actually categorizing specific occupations leaned heavily on the work of Bernard Blishen², Otis Dudley Duncan³, and Peter Pineo and John Porter⁴. The generic variables which contributed to the occupational classifications were (in the survey instrument) Variable 3 (what type of work the respondent's job involved), Variable 4 (whether the respondent had received off-the-job

¹Peter M. Blau and Otis Dudley Duncan, *The American Occupational Structure*. (New York: John Wiley, 1967).

²Bernard Blishen, "The construction and use of an occupational class scale," *Canadian Journal of Economics and Political Science* 24 (1958), pp. 519-31.

³Otis Dudley Duncan, 'A Socio-economic Index for all Occupations and Properties and Characteristics of the Socio-economic Index,' in Albert J. Reiss (ed.), *Occupations and Social Status*. (New York: The Free Press, 1961), pp. 109-138.

⁴Peter C. Pineo and John Porter, "Occupational prestige in Canada," *Canadian Review of Sociology and Anthropology* 4 (1967), pp. 24-40.

formal training), Variable 5 (highest levels of education achieved by the respondent), and Variable 2 (occupational description). Variable 2 was then coded in terms of the classifications listed above.

Those who undertook manual work which demanded no formal training or certification were classed as unskilled blue-collar workers. Examples of this category would be general laboring and what the oil industry refers to as a 'roustabout.' Manual occupations demanding a minimum of skills, such as truck driving and general maintenance, were classed as semi-skilled blue-collar. Respondents who had trade certification in such areas as electrical, plumbing, carpentry or gas fitting were classed as skilled blue-collar.

White-collar occupations can be a little more difficult to define. But since few white-collar occupations involve no training an unskilled white-collar category was not included here. White-collar occupations which involved some form of on-the-job training, such as office clerk and warehouse inventory keeper, were classed as semi-skilled. The skilled white-collar category proved to be very broad and included occupations ranging from computer programming to managerial positions. Practically all had university or college diplomas. The professional white-collar category was reserved for those who held university degrees in recognized professional fields. Examples would be engineering, law, and chartered accountancy. Classification cues were utilized sequentially, beginning with Variable 2 (occupation description). This was then crosschecked with Variable 3 (what the job involved), then with Variable 4 (formal training), and finally with Variable 5 (education levels achieved).

Descriptive Analysis: All descriptive data were analyzed by means of the SPSS sub program "Crosstabulation." Unfortunately, this routine depends on threshold cell frequencies to produce statistical measures of association. Having a 'mechanical' as opposed to a purely mathematical function, extensive elaboration with crosstabulation, particularly in small samples, often becomes meaningless. Nevertheless, it is an extremely useful descriptive tool when only a limited number of variables are used in each analysis. A major advantage with crosstabulation is that cell frequencies are displayed for easy comparison with others in the table.

Inferential Analysis: Statistical techniques used for testing hypotheses included

crosstabulation (at the bivariate level), multiple stepwise regression, and discriminant analysis. The latter was considered appropriate for analyzing the MIRO test battery, since it is designed to statistically distinguish or 'discriminate' between or among groups of cases. At the core of this sub-program are sets of discriminating variables used to predict characteristics upon which the groups involved are expected to differ. Mathematically, this is achieved on the basis of linear combinations of the predictors, which are of the form:

$$D_i = d_{i1} Z_1 + d_{i2} Z_2 + \dots + d_{ip} Z_p^1$$

where D_i represents the score on discriminant function i ; the d 's are weighting coefficients, and Z s are the standardized values of the p discriminating variables used in the analysis. Weighting coefficients can be interpreted in much the same fashion as in multiple regression or factor analysis, since in effect they identify those variables which contribute most to differentiation along each function.

It is important to note, however, that from the standpoint of its application to the MIRO test battery, discriminant analysis was not used in the conventional sense. Most users employ the routine's classificatory ability to develop predictors capable of identifying and measuring characteristics of cases. Here, this principle was turned on its head, so to speak, by pre-developing variables that represented specific reference other typologies and then determining how well these variables were able to discriminate among the occupational groups. Thus, the predictors were transformed into criterions. Moreover, conventional use permits the extrapolation of relationships among *known* group memberships to cases with *unknown* membership. Here, the classification routine distinguished one group from the other(s) on the basis of their 'known' occupational groupings. The proportion of known groups 'correctly' classified indicated the discriminating power of the criterions, while also quantifying the separation between groups. Discriminant's classification technique involves the use of a separate linear combination of the discriminating variables for each group. These produce a statistical probability of membership in each respective group and the case in question is then assigned to the occupational group with the highest probability. This orientation and the

¹See William R. Klecka, 'Discriminant Analysis,' in Norman H. Nie, et al., *Statistical Package for the Social Sciences*, 2nd Edition. (New York: McGraw-Hill Book Company, 1970), pp. 434-467.

pre-development of criterion variables was necessary in order to permit identification of the precise relationships operating among the criterions. Further elaboration of these methodological considerations will be provided in the following section.

Options used in the discriminant routine included 'direct' inclusion of all criterions without stepwise selection, a default minimum of .001 to avoid rounding errors during computation of discriminant coefficients, (Varimax) rotation of the discriminant functions to permit printing of the standardized coefficients, and printout of the classification results.

Stepwise Multiple Regression: This statistical technique was used to test hypotheses relating to the possible specification of predictor variables involved in post-decision satisfaction. As Fred Kerlinger and E. Pedhazer¹ note, multiple regression can be used as a descriptive tool for ascertaining linear relationships and evaluating their prediction accuracy, for exploring structural relations, and for exposing confounding factors when evaluating the contributions of specific variables. It also has an important function in statistical inference, where the researcher is attempting to generalize to a population. The major objective of using the sub-program in this study was to determine causality, i.e. to describe the structure of linkages between criterion and predictors and to assess the consequences of the a priori model. The 'stepwise' option enables the researcher to see how predictor variables 'stack' in terms of their proportional contribution to explained variation, and to determine whether such relationships are statistically significant. The regression model identifies the regression coefficients (*b*), their standard errors (SE), F values for the overall regression equation, and F values for the regression coefficients at each inclusion level. The latter was used to determine statistical significance at, or better than, .05. Proportions of explained variation are given in terms of r^2 .

Although the routine was not rigorously applied, only criterions with interval scaling were employed. Some predictor variable transformation was required, most of which was achieved through the construction of dummy variables. Their operationalization will be discussed in Chapter Seven.

¹Fred N. Kerlinger and E. Pedhazer, *Multiple Regression in Behavioral Research*. (New York: Holt, Rinehart and Winston, 1973).

F. The Migrant's Reference Other Test Battery

The purpose of the MIRO test was to identify migrants' most salient source of destination-related information. This includes not only the job search but also other information related to the move. Such sources would be considered the migrant's 'reference other' in terms of information search behavior. It was anticipated that the test battery would also reveal something about the nature of the migrant-reference other relationship. Such information is difficult to gather by direct means and is more easily inferred from a series of indicators.

It has already been noted that very few attempts have been made to apply the concept of the reference other in empirical research, particularly in relation to migrant behavior. A useful exception, although not directly related to this area of investigation, is the Wisconsin Significant Other Battery (WSOB), developed by Archibald Haller and Joseph Woelfel¹ during the late 1960s. The MIRO test is informed to a large extent by this model. Under a U.S. Federal government grant, Haller and his colleagues designed the WSOB to identify the 'significant others' of Wisconsin high school students in their approach to educational and occupational aspirations. Following Baldwin, Cooley, and Mead, Haller and Woelfel consider the terms 'reference other' and 'significant other' to be functional equivalents. The latter term is, of course, attributable to the psychologist Harry Stack Sullivan, who did much to advance Mead's concept of 'generalized other' into a more clearly defined dialectic between the social self and those who exert an influence upon it. Indeed, Sullivan's perspective might be described as a rapprochement between Freudian theory and the American school of personality dynamics. He was mainly interested in the process by which an organism became integrated with its milieu. What the human organism became, in a psychosocial sense, resulted from the interaction between what its biology dictated and what its environment suggested.

Measurement Techniques: Haller and Woelfel note two fairly distinct problems in measuring the influence of significant others. The first lies in identifying the 'other,' while the second lies in actually measuring the 'influence.' According to the authors, three orthodox techniques can be employed in empirically identifying significant others:

¹Archibald O. Haller and Joseph Woelfel. The Wisconsin Significant Other Battery. Final Report. Project #5-1170. U.S. Department of Health, Education, and Welfare, June, 1969.

1. Use of predeveloped categories defined by the researcher.
2. Use of stimulus questions which identify significant others as perceived/defined by ego.
3. Use of direct observational techniques.

The first two can be implemented by interviews and questionnaires, while the third lends itself to observational or participant observational techniques. They are critical of all three approaches. The first assumes that the individual's perception to influence corresponds closely to the facts, which may not be the case. Secondly, not all roles may be significant for all individuals, and some individuals may have significant others not on the list. The second approach is also faulted on the grounds that not all influence may be perceived by the individual. For example, he may be influenced without being aware that influence is being exerted. Moreover, even influence of which he is cognizant may be overlooked because the instrument fails to provide cues to guide his thinking. They are critical of the third approach on the grounds that the researcher may become an independent variable, thus upsetting otherwise normal patterns of behavior.

The Haller-Woelfel alternative might be best described as an 'indirect-recursive' model. Unlike the MIRO test battery, which addresses information search, the WSOB takes 'attitudes' as its conceptual datum. While the two are obviously interrelated there is nevertheless a shift of empirical emphasis. According to the authors, significant others are those persons who exercise major influence over the attitudes of individuals; therefore, attitudes become relationships between an individual and the reference object. Their perspective is compatible with arguments presented in Chapter Four, namely that an individual's perception of objects is always mediated by some symbolic structure. As Kuhn noted, the relationship is that which the individual perceives between his conception of self and of the object(s) in question. Their methodology was guided by the following assumptions:

"Attitudes are not indivisible units but rather are constructed of component parts. Consequently, it is possible for a significant other to exercise influence over parts of an attitude as well as the entire attitude."

"Attitudes and the components of attitudes themselves rest on larger cognitive structures, and consequently may be modified indirectly by modification of these larger structures."

"Influence over attitudes, their components or the larger structures on which they depend may be caused, both by persons and groups that set norms for the individual by holding expectations for him in some other way communicating with him and by persons or groups which stand as points of

cognitive reference."¹

They also recognize that the attitude objects could be conceptually distinct objects, with relationships operating only within a given set of circumstances. What Haller and Woelfel are saying is that significant/reference others are both type and situation-specific, and they vary in the nature and extent of their influence in accordance with the social context within which the relationship operates.

Instrument Design: the WSOB: Dependent variables in the WSOB were educational and occupational aspirations. Initially, respondents were asked, in an interview setting, to define several dimensions of the dependent variables, such as 'physician' as representative of occupation. Responses to these questions were considered 'filter' categories in that they exert a filtering effect on the perception of the objects placed within them. For each filter category respondents would then be asked to identify who they had discussed it with, and to identify an individual who best represented, in the respondent's judgement, that specific filter category. Individuals whom the respondent spoke to with respect to the filters were termed 'definers', while those identified as examples of the filter categories were considered 'models.' Specific models and definers which articulated together were considered the respondent's significant/reference other(s). This strategy was to avoid asking respondents about their reference objects in a direct fashion.

As a parallel to the occupation and education protocols respondents were asked to identify what they considered to be the essential elements of the objects under discussion, and then to assess whether they (themselves) possessed such qualities. These 'self filters' enabled Haller and Woelfel to determine the manner in which respondents identify themselves (the self-reflexive activity as defined by Mead) by citing relationships to the objects of their experience. Due to the large and disparate filter categories accumulated during preliminary interviewing, they were obliged to collapse them into four categories:

1. *Intrinsic Nature.* Responses that indicate activities contributing directly to the nature of an object, such as an occupation. For example, 'digging ditches' is a specific aspect of laboring.
2. *Extrinsic Nature.* Responses that describe the context of a specific object.

¹Haller and Woelfel, *op. cit.*, p. 34.

'Working outside in the cold' describes one context of digging ditches.

3. *Intrinsic Function.* Responses that describe the purpose (function) of an object. For example, 'digging a ditch to lay pipe' describes the reason why the ditch is being dug.
4. *Extrinsic Function.* This category describes aspects of and objects which are not inherently part of it but may be more accurately described as corollaries. Laboring, for example, earns money; it's a living.

Once these filters had been developed, Haller and Woelfel proceeded to construct a questionnaire for distribution among the sample involved. This same instrument was administered to the focal individuals, both definers and models, identified by respondents. It was hypothesized that there would be a systematic relationship between the aggregate value of the expectations of the reference others and the aspirations of ego.

This stage represents only one dimension of the WSOB. However, the others are not relevant to this discussion. The MIRO test battery, while informed by the WSOB, makes several important conceptual and methodological departures from it. To begin with, its application to information search permitted a much less recursive model. Secondly, as noted earlier, the reference others were preconceived and identified as typologies. Haller and Woelfel's conception of the 'filter category' was adopted, but these became the batteries of criterion variables developed as indicators of each typology. Most importantly, the respondents themselves were operationalized as predictor variables by assigning them to occupational groups. Thus, the typologies remained as (intervening) non-variables. Like Haller and Woelfel's four filter categories, the criterion batteries in the MIRO test were designed to function as visual cues. A major point of departure was that identification of definers and models was manipulated by the researcher, rather than by the respondent.

Moreover, since the reference other perspective acknowledges a slightly different intellectual tradition it demanded attention to relationships not addressed by the WSOB. Design of the criterion batteries derives from the work of Schmitt¹ which, it will be recalled, began by describing the reference relationship in terms of 'Type', 'Scope',

¹Raymond L. Schmitt, op. cit., pp. 39–74.

and 'Role.' These are incorporated into criterion design as reference 'dimensions.' Schmitt's terminology and conception of the dimensions were modified for the MIRO test. The term 'Type' was replaced by 'Function', and 'Scope' by 'Credibility.' A series of semantic criterions were developed for each reference other typology. Two criterions tapped each type of relationship in each dimension, producing a total of 12 criterions for each typology. One of each pair representing the types in the dimensions addressed specific issues relating to the move; the other was couched in more general terms, dealing with abstract rather than specific issues. Like the WSOB it was necessary to produce a set of criterions which only indirectly identified the reference other, but which were worded in such a way as to cue the three dimensions of the relationship. For example, questions representing the 'comparative function' stimulated the respondent to think about his situation compared to that presented or epitomized by a migrant stock, mass media, or employment networks. Schmitt devotes considerable attention to the 'positive' versus 'negative' relationship between ego and other. Likert-type scaling, because of its simplicity and intuitive appeal, was used to core the criterions. Moreover, this type of scaling is well suited to sensitizing the instrument to a positive-or-negative type of relationship.

Role of the Reference Relationship: Schmitt discusses the role character of the reference relationship in terms of 'specificity.' A 'role related' relationship exists when influence of the other is confined to a specific role. A 'person reference' relationship exists between ego and other when influence is not restricted to a purely role relationship. As Schmitt notes, this to some extent addresses 'scope' and consequently discrete treatment of scope is not adopted here. The issue is whether ego is influenced by the reference other in terms of a narrowly defined set of roles, or whether this parameter yields to a broader range of influences. Accordingly, criterions were developed which identified the two types.

Reference Credibility: Schmitt was concerned with the extent of influence that other may have upon ego. His conceptualization of this dimension is that of overt compliance, internalization, and identification. It was noted previously that the modification of reference relationships will inevitably involve behavior, but not necessarily an internalization of influence. However, the mechanisms that actually drive the process are

triggered by the degree of salience attributed to the source, which in turn is largely a function of source credibility. Not the degree of credibility but, rather, its 'range.' Consequently, the MIRO test attempted to identify the range of credibility rather than scope as defined by Schmitt. Credibility was considered to be either 'job specific' or 'generalized', thus producing a dichotomy. The former not surprisingly refers to credibility that is limited to the job search, while the latter broadens these parameters into the social realm. For example, a migrant stock may assist ego to find a job, but will also probably provide moral support. Conversely, the credibility of mass media is likely to be limited to its role in disseminating information about destination alternatives.

Function of the Reference Relationship: Schmitt identifies three functions of a reference other relationship: 'Identification object,' 'Normative', and 'Comparative.' Since elements of his conception of an identification object relationship (which describes ego's sentiment toward the reference other) is in fact woven into the conceptual fabric of the other two functions it was not considered as a discrete typology here. Criterions were developed which indicated whether the respondent's relationship was of a comparative or normative nature. While both types are largely relative, the former refers to an association in which other functions as a role model. From this datum ego assesses life chances (as epitomized or portrayed by other) relative to his own circumstances. There may be a membership function (which was not determined by the MIRO test battery) but probably little or no sanctioning capacity on the part of other.

Primarily, a normative relationship is considered to exist when other is in a position to alter ego's attitude(s) and/or behavior. This is consistent with Schmitt's conception. Of course, the problem here is that all reference relationships involve some degree of influence, otherwise such a relationship would not exist. A key factor is other's ability to invoke penalties or sanctions if expectations, as perceived by ego, are violated. Shibutani is one of several who are critical of this view, claiming that normative influence presupposes identification. But this tends to ignore influence taken under advisement, in which it becomes a purely psychological adjustment rather than a behavioral one. Consequently, the cutting point between normative and comparative influence will be understood here as non-volitional versus volitional influence exerted by the reference other. Such a relationship would normally involve membership.

The Criterion Matrix: Criterions representing each reference type were developed as ordinal (Likert-type) scales, with respondents being asked to indicate the extent of their agreement or disagreement along each. Aggregate scores permitted the discriminant analysis routine to assess degrees of separation on the basis of the predictor variables (the occupational groups). The resulting criterion matrix is reproduced below. Variable numbers correspond with those in the MIRO test battery reproduced in the Appendix. Strategies for assessing instrument validity and reliability are discussed in Chapter Six.

Reference Other Typology: Migrant Stock

Dimension A: Role Character

Type 1. Role Specific.

- Criterion 1.1.1 (move influenced by friends/relatives)
- Criterion 1.1.2 (importance of friends/relatives at destination)

Type 2. Generalized.

- Criterion 1.1.3 (friends/relatives as role model)
- Criterion 1.1.4 (friends/relatives as source of help)

Dimension B: Credibility Range

Type 1. Job Specific.

- Criterion 1.2.1 (friends/relatives as source of job information)
- Criterion 1.2.4 (moved on recommendation of friends/relatives)

Type 2. Generalized.

- Criterion 1.2.2 (relying on friends for advice)
- Criterion 1.2.3 (feeling of security from friends close by)

Dimension C: Reference Function

Type 1. Comparative.

- Criterion 1.3.1 (friends/relatives at destination showed what I was missing)
- Criterion 1.3.2 (move caused by friends/relatives doing well at destination)

Type 2. Normative.

- Criterion 1.3.3 (decision to move to make easier by friends at destination)
- Criterion 1.3.4 (uneasy over moves without friends at destination)

Reference Other Typology: Mass Media

Dimension A: Role Character

Type 1. Role Specific.

- Criterion 2.1.1 (move influenced by media)
- Criterion 2.1.2 (media good source of job info. at destination)

Type 2. Generalized.

Criterion 2.1.3 (look to media for news)

Criterion 2.1.4 (media provide accurate picture of events in Canada)

Dimension B: Credibility Range.

Type 1. Job Specific.

Criterion 2.2.1 (job opportunities suggested by media)

Criterion 2.2.3 (move because of job info. provided by media)

Type 2. Generalized.

Criterion 2.2.2 (Canadian news media unbiased)

Criterion 2.2.4 (news media valuable in job search)

Dimension C: Reference Function

Type 1. Comparative.

Criterion 2.3.1 (media made me realise what I was missing)

Criterion 2.3.2 (best way to compare wages is through media reports)

Type 2. Normative.

Criterion 2.3.3 (easy to forget how lives are influenced by media)

Criterion 2.3.4 (media increasingly organizes my life)

Reference Other Typology: Employment Networks.

Dimension A: Role Character.

Type 1. Role Specific.

Criterion 3.1.1 (decision to move influenced by trade organizations)

Criterion 3.1.2 (decision to move based on company information)

Type 2. Generalized.

Criterion 3.1.3 (membership in trade org. very beneficial)

Criterion 3.1.4 (trade org. best source of industry info.)

Dimension B: Credibility Range.

Type 1. Job Specific.

Criterion 3.2.3 ((moved because of work-place grapevine)

Criterion 3.2.4 (employer produced convincing facts)

Type 2. Generalized.

Criterion 3.2.1 (info. provided by trade organizations very influential)

Criterion 3.2.2 (membership in trade org. very influential)

Dimension C: Reference Function.

Type 1. Comparative.

Criterion 3.3.1 (heard of opportunities through work grapevine)

Criterion 3.3.2 (employer provided useful info. about destination)

Type 2. Normative.

Criterion 3.3.3 (membership in trade org. gives security)

Criterion 3.3.4 (membership in trade org. vital to job security)



Plate V.1 Rainbow Lake. Community Sign Post.



Plate V.2 Swan Hills. Town Square.



Plate V.3 Fox Creek. Gas Plant Operated by Hudson's Bay Oil and Gas.



Plate V.4 Grande Cache. The McIntyre Coal Mine.



Plate V.5 Rainbow Lake. The Air Terminal.



Plate V.6 Rainbow Lake. A Recently Built Block of Apartments.



Plate V.7 Swan Hills. The Retail-Service Area.



Plate V.8 Rainbow Lake. The Retail-Service Area.



Plate V.9 Grande Cache. B.C.F.P.'s New Plant Under Construction.



Plate V.10 Rainbow Lake. Residential Area.

VI. DESCRIPTIVE DATA ANALYSIS

Analytical procedures have been divided into two chapters. This chapter is descriptive, being intended primarily to develop a social, demographic, and attitudinal profile of the respondents. Chapter Seven will utilize gathered data to test hypotheses outlined in Chapter 4. Some of the descriptive data have been used in Chapter Seven for the purpose of assessing criterion-related validity. To avoid repetition they will not be discussed in this Chapter except in support of other data.

A. The Descriptive Data

Analysis of Cluster Samples

An inherent drawback with cluster samples is that total-sample analysis can create relationships among variables which are interpreted or specified by the sub-samples themselves. The importance of variation depends upon whether it lies within or among groups, and whether it is systematically or randomly distributed. The strategy in this study was to routinely introduce 'community' into data analyses as a control variable. In many aspects the four sub-samples were surprisingly homogeneous, particularly in issues relating to demographic attributes and community-related attitudes of respondents. Consequently, individual communities will only be discussed in instances called for by the methodology or where they are found to compromise total-sample generalizations.

Response Rate

Of the 500 questionnaires distributed to the total sample, 252 were returned. This amounts to roughly a 50 percent response rate, somewhat lower than that expected for the type of sampling methodology adopted in this study. However, it should be noted that a nation-wide postal strike occurred during the sampling process. Its psychological and material effects undoubtedly contributed to the lower response rate. The rates themselves were very uneven among the sub-samples. Grande Cache showed the lowest at 22 percent, while Fox Creek showed the highest at 81 percent. Returns for the four sample communities are as follows:

Fox Creek	-	84	(81.0%)
Grande Cache	-	48	(22.0%)

Rainbow Lake	-	20	(49.0%)
Swan Hills	-	100	(74.0%)
n =		252	

Sex Distribution

Not surprisingly, considering the sampling frame and sampling methodology, 84 percent of the respondents were males (males: n = 212; females: n=40).

Age and Marital Status

One of the more striking characteristics of an SRIC workforce, at least in terms of this sample, can be found in the age distribution. As Table 6.1 shows, average age of the total sample was 29 years. Very little variation was found among the sub-samples, although Rainbow Lake tended to be the 'youngest' and Fox Creek tended to be the 'oldest.' On the basis of occupation the unskilled blue-collar migrants comprised the youngest group. While all occupational groups were similar in average age it can be seen that age increases with skill levels. The 'oldest' groups comprised the skilled blue-collar and professional white-collar migrants. Age for the total sample ranged from 18 to 53 years; however, only 29 respondents were over the age of 40. Seventy-six percent were between 21 and 25. Average age of the females was 27.6. Virtually no occupational differences were found among females on the basis of age since most belonged to the semi skilled white-collar group.

Marital Status: Sixty-five percent of the respondents were married; nearly 9 percent were separated or divorced. None was widowed. Table 6.2 shows that the largest proportion of unmarried (never married) migrants was among the unskilled who, it was previously pointed out, comprised the youngest occupational group. The skilled blue-collar migrants were the 'most married' of the six occupational groups (68.1 percent), followed by the semi-skilled white-collar workers (66.7 percent). Rates of separation and divorce are interesting, since they tend to increase with occupational skill levels (but not systematically with age). The highest rate occurred among the professional white-collar migrants (12.5 percent), while the unskilled had the lowest rate. Nevertheless, it should be noted that the second lowest rate occurred in the skilled white-collar group. Males were slightly more frequently married than females (65.9 versus 61.8 percent), but twice as many females were divorced or separated (14.7

Table 6.1
Crosstabulation of Average Age of Respondent and
Occupation by Community. Combined Sexes.

Occupational Group	Community				Row Average
	Fox Creek	Grande Cache	Rainbow Lake	Swan Hills	
Unskilled/Semi-Skilled	28.25	27.92	36.20	26.93	28.54
Skilled blue-collar	28.45	31.33	25.50	30.67	29.84
Skilled/Prof White-collar	26.04	39.00	31.50	29.82	28.76
Column Average	27.58	32.75	31.06	29.14	29.01

versus 7.4 percent). Several respondents indicated that their separation or divorce was a direct consequence of their decision to move to an SRIC. Interestingly, among those who divulged this information the males tended to have become separated/divorced while living in their present community, while the females had arrived following marital breakdown.

Just over 84 percent of those who were married stated that their wives/husbands were living in the community with them. As Table 6.3 shows, the six occupational groups were very similar in this aspect. The married semi-skilled white-collar migrants had the lowest proportion of spouses living in the community; skilled white-collar migrants had the highest. Females, who it will be recalled had twice the rate of divorce and separation as males, also had a much lower proportion of spouses living in the community (71.4 versus 87 percent). This was particularly noticeable among the skilled white-collar females. These findings suggest some response ambiguity on this variable, with some females perhaps stating they were married when in fact they were separated. Legally, of course, they were quite correct; however, the variable categories clearly distinguished between these two states.

Table 6.2

Crosstabulation of Occupation and Marital Status by Sex of Respondent Total Sample.

Table 6.3

Proportion of Married Respondents with Spouse Living in Community
by Occupation and Sex. Total Sample.

		Occupational Groups.											
Spouse in Community		Unskilled Blue-collar		Semi-skilled blue-collar		Skilled Blue-collar		Semi-skilled White collar		Skilled White collar		Professional White collar	
		Male	Female	Male	Female	Male	Female	Male	Female	Male	Female	Male	Female
Yes		100.0%	-	97.5%	-	100.0%	-	100.0%	100.0%	92.8%	83.3%	83.3%	-
No		-	-	2.5%	-	-	-	-	-	7.2%	6.7%	16.7%	-
Column Frequencies		6	-	46	-	55	-	3	16	15	7	12	-

Children: Of those who were married, or had been married, 78.5 percent had children. The semi-skilled white-collar group had the lowest proportion while the semi-skilled blue-collar group had the highest. Generally, females were more likely to have children than males. Of those who had children, 68.6 percent had two or more; the mode was two. Skilled blue-collar migrants had the most children, with an average of 2.32. The professional white-collar group had the lowest average at 1.77. These figures compare with an average of 2.07 for the total sample. Fewer children were still living at home; the average for the total sample declined to 1.91. Declines were most noticeable among the skilled blue and white-collar migrants, undoubtedly reflecting higher average ages among these groups. All the unskilled migrants with children had them still living at home. The second lowest decline was among the semi-skilled white-collar migrants. Generally, a higher proportion of females than males had children still living at home (92.3 versus 84.7 percent). Rainbow Lake had the lowest proportion of migrants with children; Grande Cache had the highest.

Many researchers have stressed the importance of marital status as an independent variable in SRIC demographics. Migrants to these communities tend to be stereotyped as single, footloose, and less reliable in the workplace than married migrants. Conversations with personnel managers and field supervisors in the four sample communities revealed that, by and large, employers subscribe to this stereotype. Most indicated a preference for hiring married workers, especially those with young children, because they contributed permanence and stability both to the company and to the community. According to management informants, single workers often quit their jobs within months, creating additional inconvenience and expense in re-hiring and training. They were regularly identified as a disturbing element in community relations and much more likely than married workers to run afoul of the law. Nevertheless, employers are beginning to recognize some of the problems associated with hiring older married workers. The major difficulty lies not in the employees themselves, but in their children, who, as they reach junior high school age are more likely to become involved in drugs, alcohol, and vandalism.

It will be seen that in some aspects at least, assessments of single workers by employers are supported by the data. But in terms of socio-economic characteristics and

attitudes toward the job and community, married and single migrants sampled in this study often did not differ significantly. Variation among respondents was also commonly explained by such factors as occupational skill levels, sex, length of residence, age, and social background. Obviously some differences cannot be ignored, since the personal circumstances of single migrants are not likely to be the same as those who are married. However, the extent to which these differences affect motivations and attitudes are not as great as might be expected. Consequently, this section will specifically discuss marital status only where it interprets or specifies relationships.

Occupational Classifications

Table 6.4 details occupation distributions in accordance with the criteria established in Chapter 5. The proportion of unskilled workers in the sample was somewhat lower than expected, possibly reflecting some response bias. Survey methodology research suggests that response rates tend to be lower among very low and, conversely, among high socioeconomic groups. Seymour Sudman¹ is among those who claim that the less educated, particularly among minority groups, are often distrustful of data gathering strategies. Many fear the information they surrender will somehow be used against them. Others are simply hostile toward bureaucrats and the institutions they represent.

But extensive migration of the unskilled to Canadian SRICs is a popular stereotype often poorly supported by fact. There is actually little demand for the unskilled in SRICs, particularly in those supported by high technology industries such as oil and natural gas. Any demand there may be diminishes rapidly upon completion of the physical plant, since much of the routine operation is automated. There certainly appears to be a constant trickle of the unskilled to communities of this type; however, those who cannot find jobs seldom remain for very long. This has contributed to a two-stage migration process, in which migrants from other regions of the country initially head for SRICs on the assumption that these are where the big money is to be made. Upon being unable to find work they then turn toward the nearest city. For this reason unemployment in newer SRICs tends to be low compared to regional averages. Interestingly, crosstabulation of occupational skill levels with community revealed a higher proportion of unskilled in

¹Seymour Sudman, *Applied Sampling*. (New York: Academic Press, 1976), p. 17.

Grande Cache. As previously noted, this community is largely dependent upon coal extraction, which uses proportionately larger quantities of unskilled and semi-skilled workers than, for example, the oil and gas industries.

Skilled blue-collar workers comprised the largest occupational group (38.6 percent). The majority of females in the sample occupied semi-skilled white-collar jobs. Most involved clerical duties. Nevertheless, 27 percent had education levels and job descriptions which placed them in skilled white-collar positions. One female respondent was a chartered accountant.

Occupational Descriptions

All respondents were directly or indirectly involved with their community's major industry. It will be recalled that approximately 80 percent of the sampling was conducted through the major employer, the remainder through the major employer's sub-contractors. Table 6.5 shows that the large single group was engaged in equipment maintenance, which again reflects the post development stage of these communities. 'Maintenance' embraced a broad range of applications, from motor vehicles to pumping equipment. Equipment operation comprised the second largest group, while the third largest involved technical design and administration.

Formal Training: Nearly 53 percent of the respondents had received some type of formal training, exclusive of that received on the job. Predictably the proportion of formal training among occupational groups increased with skill levels. It can be seen from Table 6.6 that 87.5 percent of the professional white-collar migrants had received formal training, compared to nearly 67 percent for the skilled blue-collar migrants and only 20 percent for the unskilled. However, marital status provided some interpretation. Table 6.7 shows that while the proportion of formal training still increased with skill levels, married unskilled and semi-skilled migrants were more likely to have received some formal training than their single counterparts.

Education Levels

Data relating to occupational categories and job descriptions are supported by the distribution of education levels. It can be seen from Table 6.8 that 78 percent of the respondents had completed a minimum of Grade 12. Nearly 27 percent were either technical/vocational college or university graduates, while a further 26.7 percent had

Table 6.5
Distribution of Occupational Descriptions by Sex
of Respondent. Total Sample

Description	Males	Females	Total Frequency
Electrical installation	100.0%	—	9
Mechanical installation	100.0%	—	8
Equipment operation	97.4%	2.6%	45
Equipment maintenance	98.2%	1.8%	68
Labouring	100.0%	—	10
Construction supervision	100.0%	—	6
Maintenance supervision	92.9%	7.1%	26
Bookkeeping/secretarial	9.5%	90.5%	25
Office administration	69.2%	30.8%	15
Technical design	89.7%	10.3%	34
Blue-collar clerical	80.0%	20.0%	6

received some university or technical/vocational college training. The largest proportion of high school dropouts can be found among the unskilled, followed closely by the blue-collar semi-skilled. Ninety percent of the former had failed to complete Grade 12. Age was not a significant factor in this relationship, although the high school dropouts tended to be somewhat younger than the average age for the group. Proportionately fewer males than females had completed Grade 12, but far fewer of the latter had received higher education.

Not surprisingly, the high school dropout rate declines with increased occupational skill levels. Technical-vocational college/university graduation was limited to the skilled/professional groups, except for a small proportion (12 percent) among the semi-skilled white-collar group. Only one of the skilled blue-collar respondents was a university graduate. However, 27.5 percent of this group had graduated from a

Table 6.6

Proportion of Respondents who received Formal Training, by Occupation. Total Sample.

Formal Training	N	Occupational Groups						Row %
		UBC	SSBC	SBC	SSWC	SWC	PWC	
Yes	132	20.0%	33.3%	66.7%	41.7%	62.1%	87.5%	52.9%
No	117	80.0%	66.7%	33.3%	58.3%	37.9%	12.5%	47.1%
Column %	249	4.8%	28.8%	33.2%	11.5%	13.9%	7.7%	100.0%

technical/vocational college and a further 36 percent had received some college or university training. The highest proportion of technical/vocational college graduates was found in the skilled white-collar group (43.3 percent). Cross-tabulation with occupational description showed that a sizeable number of these individuals were involved in technical or administrative work associated with the oil and gas industry.

Housing and Accommodation

Thirty-one percent of the respondents were living in single family (detached), permanent dwellings at the time of the survey. Of the remainder, nearly 30 percent were occupying mobile homes while a further 19 percent were living in apartments. Only 2 percent of the sample were living in campsite accommodation. As might be expected, a low proportion (25.7) percent owned their accommodation.

Closer examination of the data (Table 6.9) shows that ownership and type of accommodation varied with both marital status and occupational skill levels. The unskilled/semi-skilled were more likely to occupy a mobile home than the other occupational groups (37.2 percent compared to 27.9 and 15.6 percent for the skilled blue-collar and skilled/professional white-collar migrants respectively). Conversely, this group was less likely to occupy a permanent single family dwelling than the other groups.

Table 6.7

Proportion of Respondents who Received Formal Training
by Occupation and Marital Status. Total Sample.

		Occupational Groups												
		Unskilled/semi skilled			Skilled blue-collar			Skilled/Prof. white collar						
Formal Training	N	Married	N	Unmarried	N	Married	N	Unmarried	N	Married	N	Unmarried		
		Yes	(27)	40.0%	(10)	25.0%	(38)	69.6%	(17)	30.4%	(24)	62.5%	(14)	37.5%
No	(43)	60.0%	(31)	41.9%	(18)	65.2%	(10)	34.8%	(10)	61.5%	(6)	38.5%		
Column Frequencies	70		41		56		27		34		20			

Table 6.8
Crosstabulation of Occupation and Education Attainment.
Total Sample.

Table 6.9

Type of Accommodation and Nature of Ownership Crossstabulation
with Occupation and Marital Status. Total Sample.

Occupation Group	Permanent Single Family	Temporary Single Family	Type of Accommodation						Mobile Home	Campsite	
			Row House			Condominium	Apartment	Rented			
			Duplex	Owned	Rented	Owned	Rented	Owned			
Unskilled/Semi-Skilled											
Skilled											
Married	29.6%	70.4%	50.0%	50.0%	—	100.0%	100.0%	—	—	—	—
Unmarried	50.0%	50.0%	—	100.0%	—	100.0%	—	—	100.0%	—	100.0%
Skilled blue-collar											
Married	34.5%	65.5%	33.3%	66.7%	—	100.0%	—	—	100.0%	—	—
Unmarried	33.3%	66.7%	—	100.0%	—	—	—	—	100.0%	—	100.0%
Skilled/prof white collar											
Married	9.5	90.5%	—	—	—	100.0%	—	—	—	50.0%	—
Unmarried	—	—	—	—	—	100.0%	—	—	—	33.3%	—
Skilled/prof white collar											
Skilled											
Married	—	—	—	—	—	100.0%	—	—	—	100.0%	—
Unmarried	—	—	—	—	—	100.0%	—	—	—	66.7%	—

However, it can be seen that the difference is less for those in the group who were married. While most of the permanent single family dwellings were occupied by the skilled blue-collar and skilled/professional white-collar migrants, this held only for those who were married. The majority of single skilled/professional migrants occupied apartments.

Nearly three times as many married as single respondents owned their accommodation. But there were also differences based on occupational skill levels. Just over 38 percent of the married unskilled/semi-skilled owned their accommodation; however, this largely comprised mobile homes, which can of course be easily moved when the owner leaves the community. Nevertheless, as Table 6.10 shows, accommodation ownership was also highest for the single unskilled/semi-skilled; again it almost totally comprised mobile homes. Ownership was lowest among the skilled/professional white-collar group, regardless of marital status— although it was higher for those who were married. Moreover, only 34 percent of the married skilled blue-collar migrants owned their accommodation. A major reason for these differences was subsidized housing. In all four sample communities housing was provided by the major employer at reduced rates. Indeed, the provision of subsidized housing is a major strategy of employers in SRICs to foster a more permanent workforce. Just as significantly, perhaps, it reflects the employer's bias toward married employees.

In Grande Cache, for example, something of a struggle has emerged between McIntyre Mines and British Columbia Forest Products (BCFP) for serviced land. The type of quality of housing provided is to some extent an indicator of resource profitability. McIntyre's housing, although adequate, was older and less sophisticated than that provided by BCFP, which in turn paled by comparison with some of the housing provided by the oil and gas developers. In many instances the type of company housing enjoyed by workers corresponded with their skill levels and marital status. Highly skilled, married employees were more likely to receive company housing than the less skilled. In Rainbow Lake permanent detached homes were awarded to the more senior and/or skilled employees, provided they were married. The highly skilled, single employees were usually housed in apartments; the less skilled were left to find their own accommodation or were housed at the campsites.

Table 6.10
Crosstabulation of Accommodation Ownership and Occupation.
Total Sample.

Type of Ownership	N	Occupational Group		
		Unskilled/ semi-skilled	Skilled blue-collar	Skilled/prof. white collar
Owned	64	30.9%	27.5%	10.9%
Rented	182	69.1%	72.5%	89.1%
Column %	246	45.0%	33.0%	22.0%

As a result of these policies, therefore, it is not surprising to find the lowest proportion of ownership among the skilled/professional groups. Of the respondents who stated that they rented their accommodation 78 percent enjoyed rent subsidies. Row housing received the largest proportion of rent subsidies (91.7 percent), followed by permanent detached dwellings (88.5 percent) and mobile homes (71.4 percent). It should be noted here that some of the larger sub-contractors also offered subsidized accommodation to their key employees, much of it being mobile homes. The majority of those who presently owned their accommodation had experienced ownership before. But again this occurred mostly among the owners of mobile homes. Of those who were presently renting their accommodation, only 33 percent had previously owned a home. The highest proportion of non previous ownership occurred among the single, unskilled/semi-skilled (71.2 percent), followed by the skilled/professional white-collar group (71.2 percent). In terms of the dwelling units themselves, the largest proportion of ownership was found in mobile homes. Table 6.10 shows that nearly 54 percent of these units were owned, compared to 40.7 percent of the permanent detached dwellings. Other forms of accommodation were almost totally rented.

Generally, it can be seen that the married, skilled/professional workers tended to occupy rented, permanent detached dwellings while their unmarried counterparts occupied apartments. The less skilled, regardless of marital status, were more likely to

occupy mobile homes.

Place of Origin

Inclusive of unspecified responses, 43 percent of the respondents had been living in Alberta immediately prior to arrival in their respective communities. The largest out-of-province group was from Ontario. Total distributions are given in Table 6.11. There was no significant relationship between occupational skill levels and prior residence. However, the largest proportion of migrants who had immediately previously been living in Alberta can be found in the skilled blue-collar (52.2 percent) and skilled/professional white-collar groups (43.5 percent). Of those who had been previously living in Ontario, the majority (52.6 percent) were either unskilled or semi-skilled and more likely to be unmarried. The proportion of unskilled/semi skilled from Quebec was even higher (83.3 percent). They were also more likely to be unmarried.

Migrants from provinces outside Alberta tended to be younger than average for the total sample, but again this feature was specified by occupation; the more highly skilled from other provinces were slightly older than the other occupational groups. Generally, age was not systematically related to prior residence; rather, it was more predictive of occupational skill levels.

Population of Prior Residence: Respondents were also asked about population sizes of their immediately previous place of residence. It can be seen from Table 6.12 that an overwhelming proportion of the blue-collar groups, and in particular those who were married, had been living in either 'rural' or comparatively small communities. The Canada Census classifies open country and incorporated places of less than one thousand inhabitants as 'rural.' Ninety-six percent of those coming from rural places belonged to the blue-collar groups. In fact, 38.3 percent of these groups had been living in communities of less than 10,000 population. These figures contrast sharply with the skilled/professional white-collar group. Fifty percent had been living in cities of over 500,000, although the table shows a further 20 percent coming from communities of less than 5,000 population. Other data revealed that 75 percent of the latter had been working in an SRIC.

Rural-Urban Backgrounds: Of the 59 percent of respondents who considered their

Table 6.11

Crosstabulation of Prior Residence Location and Occupation
Total Sample.

Occupational Group	Prior Residence Location							Row Total
	Alta.	B.C.	Sask.	Man.	Ont.	P.Q.	Nfld.	
Unskilled/ semi skilled	Row %	37.2%	6.4%	4.3%	10.6%	5.3%	4.3%	2.1% — 21.3%
	Col %	38.5%	46.2%	50.0%	36.4%	52.6%	83.3%	66.7% — 47.6%
Skilled blue- collar	Row %	52.2%	4.3%	1.4%	7.2%	5.8%	1.4%	1.4% — 18.8%
	Col %	39.6%	23.1%	12.5%	45.5%	21.1%	16.7%	16.7% — 21.4%
Skilled prof. white collar	Row %	43.5%	8.7%	6.5%	4.3%	10.9%	— 2.2% — 16.7%	— — — — 100.0% — — 30.9%
	Col %	22.0%	30.8%	37.5%	18.2%	26.3%	— — — — — — —	83 — — — — — — 251
Column Frequencies	110	15	9	13	24	7	5	3 50 251

Table 6.12
Crosstabulation of Prior Residence Population and Occupation
Total Sample.

backgrounds to be 'rural', nearly 90 percent belonged to the blue-collar groups. Nearly 77 percent of the married skilled blue-collar and 74 percent of the married unskilled/semi skilled blue-collar migrants had rural backgrounds. The proportion of unmarried blue-collar migrants with rural backgrounds was roughly 15 percent lower. Nevertheless, these figures contrast sharply with the skilled/professional white-collar migrants, of whom 75 percent considered their backgrounds to be urban. The proportion was even higher (82.4 percent) among the married respondents in this group. Of those reporting rural backgrounds, 94.7 percent had been born and raised on a farm. Again, the unskilled/semi skilled with rural backgrounds were far more likely to have been raised on a farm—55.6 percent compared to 35.2 percent for the skilled blue-collar group and 9.3 percent for the skilled/professional white-collar group. They were also more likely to be married and somewhat older than average for their group. Twenty-nine percent of the total sample had been born and raised on a farm.

There was no statistically significant relationship between rural–urban background and prior residence, although a slightly higher proportion of those who had previously been living outside Alberta reported rural backgrounds. Age differences tended to cut across the occupational groups, with those claiming rural backgrounds being slightly older than respondents with urban backgrounds. Overall, this was more noticeable among those with rural backgrounds who had been born and raised on a farm.

Prior Migration Experience

The popular literature tends to convey the image of a highly transient SRIC workforce. Indeed, it was noted in Chapter 1 that many manpower and community-related problems are attributed to this phenomenon. Data obtained in this study do not entirely support the stereotype. While those who go to work in SRICs may not stay long, respondents sampled here were far from transient. For nearly 30 percent this was the first inter-community move they had made since entering the workforce. Only 14 percent of the total sample had moved more than four times. Table 6.13 shows the blue-collar workers to be more migratory than their skilled/professional white-collar counterparts. However, this relationship is specified by marital status. Generally, the married migrants had moved more often than those who were single and this is clearly, to some extent, a function of age differences. Nevertheless, significant differences can

Table 6.13

Crosstabulation of Prior Migration Experience and
Occupation by Marital Status. Total Sample.

Occupational Group	N	Number of times moved										
		Married			Unmarried							
		1	2	3	4	5	>6	N	1	2	3	4
Unskilled/ Semi Skilled	72	40.0%	11.7%	15.0%	15.0%	3.3%	15.0%	40	32.4%	20.6%	14.7%	11.8%
Skilled blue-collar	55	12.8%	10.6%	21.3%	10.6%	8.5%	36.2%	26	13.6%	22.7%	22.7%	18.2%
Skilled/prof white collar	34	37.9%	6.9%	20.7%	20.7%	6.9%	6.9%	19	47.1%	35.3%	—	11.8%
Column %	161	30.2%	10.3%	18.4%	14.7%	5.9%	20.6%	85	30.1%	24.7%	13.7%	13.7%

be seen among the married migrants. The skilled blue-collar group was clearly the most migratory; 87.2 percent had moved more than once, compared to 62.1 and 60 percent for the skilled/professional white-collar and unskilled/semi-skilled blue-collar migrants respectively. They had also made considerably *more* moves than the other groups; 36.2 percent had moved six or more times. It is worth remembering that this group had the highest average age (although with the second highest variance) of the six. But apart from this distinction, within-group migration experience was dispersed fairly evenly throughout the age categories.

The migratory character of the skilled blue-collar workers should not be ignored, since in effect they comprise the backbone of an SRIC workforce. Hence it would be toward this group that employers could be expected to direct strategies for encouraging permanent settlement. It should also be remembered that these communities were in a post start-up phase, during which period the itinerant workforce would slowly be giving way to one which was more operation-oriented.

Controlling for community produced some specification. Migrants to Swan Hills and Rainbow Lake were more likely to have moved more times than migrants to the other two sample communities. Again, the most transient in Swan Hills were the skilled blue-collar workers: 94.1 percent had moved more than once; 35.3 percent had moved six or more times. In Rainbow Lake the unskilled/semi skilled were the most transient. Fox Creek and Grande Cache were very similar in terms of prior migration experience; the skilled blue-collar workers were found to be the most transient.

Prior SRIC Experience

Just over 33 percent of the respondents had worked in SRIC before. Not surprisingly, perhaps, the skilled blue-collar migrants had more SRIC experience than the other occupational groups. Fifty-two percent had previously worked in this type of community. This contrasts with 22.6 percent for the unskilled/semi-skilled and 26.1 percent for the skilled/professional white-collar groups. However, it can be seen from Table 6.14 that marital status specifies these relationships. While a proportionately larger number of skilled blue-collar migrants had prior SRIC experience, the figure was even higher for the married respondents in this group (55.3 percent). However, the proportion was lower for married respondents in the other occupational groups.

Table 6.14

Proportion of Respondents who had Prior SRIC Experience
By Occupation and Marital Status. Total Sample.

		Occupational Groups										
		Unskilled/semi skilled			Skilled blue-collar			Skilled/prof white-collar				
Prior SRIC Experience	N	Married	N	Unmarried	N	Married	N	Unmarried	N	Married	N	Unmarried
Yes	(15)	21.7%	(9)	24.2%	(30)	55.3%	(12)	45.5%	(8)	24.1%	(6)	29.4%
No	(55)	78.3%	(29)	75.8%	(25)	44.7%	(14)	54.5%	(26)	75.9%	(14)	70.6%
Column Frequencies	70		38		55		26		34		20	

Although these findings do not support the notion of a 'special breed' of workers who move constantly among SRICs, it is clear that the skilled blue-collar workers come closest to the stereotype. They had moved more often than the other occupational groups and they had much more SRIC experience. But just as importantly the findings underscore the fact that there is little ongoing demand for the unskilled or marginally skilled in these communities. Three fourths of this group were apparently trying SRIC for the first time.

Length of Residence in the Community

Respondents had lived in their respective communities for an average of 33.4 months. While the skilled blue-collar workers were the most migratory in terms of moves made since entering the workforce, they tended to remain in a community longer: 37.7 months compared to 33.6 months for the unskilled/semi skilled and 26.5 months for the skilled/professional white-collar workers. The marital status of respondents helps to explain these relationships; throughout the occupational groups, married respondents had been in their communities longer than their single counterparts- an average of 65 percent longer. Inter-community differences tend to reflect degrees of 'newness' in terms of population take-off. It can be seen in Table 6.15 that on average respondents had been living in Rainbow Lake and Swan Hills for shorter periods of time than in the other two communities. Nevertheless, wide variations can be seen among occupational groups. The most consistent occupational group among all four sample communities was the unskilled/semi-skilled

Changing Jobs: The tenuous nature of employment for the less skilled is to some extent reflected in the number of times migrants had changed jobs since arriving in their respective communities. Table 6.16 shows a higher proportion of changes among the unskilled/semi-skilled skilled than among the other occupational groups. The proportion was much larger for the unmarried migrants in this group. Only 8.7 percent of the skilled/professional white-collar and 15.9 percent of the skilled blue-collar migrants had changed jobs since arriving (slightly more for the single skilled/professional white-collar and slightly less for the single skilled blue-collar workers). However, the latter group led in the *number* of moves made since arriving: an average of 2.85 compared to 1.64 for the unskilled/semi-skilled. Of the skilled/professional white-collar migrants who had

Table 6.15

Crosstabulation of Average length of Residence (months)
in the Community and Occupation by Community.

Occupational Group	Average Length of Residence		
	Fox Creek	Grande Cache	Rainbow Lake
Unskilled/semi-skilled	33.6	38.7	36.7
Skilled blue-collar	26.6	20.1	24.4
Skilled/prof. white collar	37.7	47.6	31.5
Community Average	35.5	42.9	32.7
			30.6

Table 6.16

Proportion of Respondents who had Changed Employer Since Arrival. By Occupation and Marital Status. Total Sample.

		Occupational Groups										
		Unskilled/semi skilled			Skilled blue-collar			Skilled/prof white collar				
Changed Employer	N	Married	N	Unmarried	N	Married	N	Unmarried	N	Married	N	Unmarried
Yes	(18)	26.7%	(16)	41.2%	(9)	17.0%	(4)	13.6%	(3)	6.9%	(3)	11.8%
No	(52)	73.3%	(24)	58.8%	(46)	83.0%	(21)	86.4%	(32)	93.1%	(17)	88.2%
Column Frequencies	70		40		55		25		35		20	

changed jobs, 75 percent had changed more than once. Age (of respondent) revealed some interpretation, with younger migrants showing a tendency to change jobs more often than their older counterparts. Controlling for community revealed slightly more job changes in Grande Cache, but again these tended to be mostly among the less skilled.

Jobs Prior to Moving

There is also a popular notion that most migrants to SRICs speculate on job opportunities. In other words, they are thought to migrate in the hope (or anticipation) of finding a job upon arrival. Generally, this was not found to be the case here. Nearly 69 percent of the respondents had procured, or received some assurance of, a job prior to moving. Of the total sample, 13.2 percent more married than single respondents had been hired prior to moving. However, most of the variation among respondents was based on occupational skills. Table 6.17 shows that 93 percent of the married skilled/professional white-collar migrants (slightly less for the skilled blue-collar) had been hired prior to moving. This compares with 82.6 percent for the skilled blue-collar workers (63.6 percent for those who were unmarried) and 46.8 percent for the unskilled/semi-skilled (41.2 percent for the unmarried). The rate was only 21.8 percent for the unskilled, who, it will be recalled, were less likely to be married than the other occupational groups. Age also interpreted these relationships, especially among the less skilled. A much larger proportion of older than younger workers within their respective occupational groups claimed to have jobs already lined up. This will be discussed in greater detail in the inferential analysis section. In keeping with the higher skill bias of migrants who had previously been living in Alberta, it was found that a proportionately higher number had a job already lined up. The less skilled from regions outside Alberta were much less likely to have obtained a job prior to moving.

Unemployed Prior to Moving: Although a large proportion of the respondents had procured jobs before moving, 43.5 percent had been unemployed prior to arrival. Not surprisingly, much of this unemployment was found among the unskilled and semi-skilled. However, the relationship between prior unemployment and occupation was specified by marital status. Rates were fairly similar among the unmarried respondents: 47.1, 52.9, and 59.1 percent for the skilled/professional white-collar, unskilled/semi-skilled and skilled blue-collar groups respectively. Rates among the married respondents were less similar:

Table 6.17

Proportion of Respondents who had Obtained Jobs Prior to Moving. By Occupation and Marital Status. Total Sample.

Jobs Prior to Move	Occupational Groups						Skilled/prof white collar	
	Unskilled/semi skilled			Skilled blue-collar				
	N	Married	N	Unmarried	N	Married	N	Unmarried
Yes	(36)	50.0%	(26)	41.2%	(51)	91.5%	(26)	63.6%
No	(36)	50.0%	(24)	58.8%	(5)	85%	(9)	36.4%
Column Frequencies	72	50	56	35	35	35	21	21

50, 34.5, and 25.5 percent for the unskilled/semi-skilled, skilled/professional white-collar, and skilled blue-collar groups respectively. The rates for the skilled/professional white-collar migrants was considered to be unusual. Closer examination of the data revealed that 10 percent of the skilled white-collar migrants had come directly to their respective communities upon graduation from college. But even taking this into account the rate remains high, particularly for the type of skills most of these migrants possessed. Age, aside from articulating with marital status, did not provide any significant interpretation.

Fact-Finding Before the Move

It is the policy of some employers operating in SRICs to invite prospective employees for a community visit at company expense. Obviously this practice is limited to the more highly skilled prospects, and to the high profit/high technology industries. Nearly 57 percent of the respondents had not made a fact-finding trip prior to moving (72 percent for Grande Cache). As expected, the rate of fact-finding increases with occupational skill levels, but differences are much less pronounced among the married respondents. Table 6.18 gives the distributions for married and unmarried respondents among the three major occupational groups. It can be seen that the unskilled/semi-skilled made the fewest fact-finding trips, regardless of marital status. Considerably fewer unmarried than married skilled blue-collar migrants made fact-finding trips. Rates for married and unmarried skilled/professional white-collar migrants were more similar, but still lower among the unmarried. Prior residence location produced some interpretation, with those who had previously been living in Alberta tending to make more fact-finding trips than those who had been living in other regions. Obviously this distinction reflects distance between point of origin and destination and the cost of travelling. But it should also be remembered that a high proportion of the better skilled migrants (who generally made more fact-finding trips) were already living in Alberta prior to arrival.

Time Taken to Decide: Occupational groups were very similar in the time they took to decide whether or not to move; all respondents took an average of 12 days. Skilled blue-collar migrants took the longest time (14 days), while the skilled/professional white-collar migrants took the shortest average time (10 days). Average for the unskilled/semi-skilled was identical to the total-sample average (12 days). Generally,

Table 6.18

Proportion of Respondents Who Had Made Fact-Finding Trips Prior to the Move. By Occupation and Marital Status. Total Sample.

		Occupational Groups											
		Unskilled/semi skilled			Skilled blue-collar			Skilled/prof white-collar					
Fact Finding	N	Married	N	Unmarried	N	Married	N	Unmarried	N	Married	N	Unmarried	
Yes	(34)	48.3%	(9)	23.5%	(28)	51.1%	(7)	27.3%	(19)	55.2%	(8)	41.2%	
No	(37)	51.7%	(31)	76.5%	(27)	48.9%	(20)	72.7%	(15)	44.8%	(12)	58.8%	
Column Frequencies	71		40		55		27		34		20		

married respondents took longer than their unmarried counterparts, particularly the less skilled. Differences in terms of marital status were very slight among the skilled/professional white-collar migrants.

Visits Home: Respondents were asked how many times they had returned home (or to their previous place of residence) since arriving. Contrary to expectations, there was no systematic relationship with length of residence. Similarly, few differences were noted on the basis of occupation, although the less skilled made fewer trips than the other occupational groups. They had made an average of 3.2 trips, compared to 3.5 and 3.7 for the skilled/professional white-collar and skilled blue-collar groups respectively. Marital status produced most of the variation. Overall, nearly 36 percent of the unmarried respondents had made no trips home since arriving; this compares with 18.2 percent for those who were married. The married respondents, particularly among the skilled/professional white-collar and skilled blue-collar groups, also made the *most* trips home; for example, just over 40 percent of the latter group had made over twenty.

Location of prior residence produced very little interpretation, except to the extent that it articulated with skill levels and marital status. A slightly higher proportion of those who had previously been living in Alberta had made a trip home since arriving, although they differed very little from those who had been living elsewhere in terms of the number of trips made. Generally, it seems that the better skilled, married migrants are most likely to make trips home and to make more of them.

Community and Job-Related Attitudes

Respondents were questioned extensively about their attitudes toward the job and community-related environments. Several of these variables are discussed in the inferential data analysis and consequently will not be repeated here.

Likes and Dislikes: Two variables in the survey instrument listed 12 issues related to the job environment and the community. One variable asked respondents to identify, in descending order of importance, issues which they disliked the most; the other variable asked respondents to identify those which they liked the most. Although respondents were asked to make three selections, only the primary choices in both variables will be discussed here.

Dislikes: All other factors being equal, respondents were far more concerned about the

community environment than the workplace. Chief among these issues was the inadequacy of recreation facilities. Controlling for community produced virtually no interpretation in this regard except to the extent that it was slightly less of an issue in Grande Cache. Generally, occupation and marital status, rather than community, explained most of the variation in response distributions. As might be expected, married migrants had a number of concerns which were irrelevant to those who were unmarried. Nevertheless, in many instances marital status produced only some interpretation, with differences among occupational skill levels persisting.

Table 6.19 shows that much of the concern for inadequate recreation and entertainment facilities was expressed by the unmarried respondents. Unmarried blue-collar migrants tended to stress the recreation factor, while the unmarried skilled/professional white-collar migrants were more inclined to stress entertainment facilities. Nevertheless, the married blue-collar workers also identified recreation problems, although possibly for different reasons. It is likely that while the single respondents were speaking for themselves, their married counterparts were speaking on behalf of their children. This issue takes on added significance when it is recalled that 54 percent of the respondents had children under the age of 18 still living at home. Indeed, keeping children occupied and out of trouble during non-school hours was a common topic of conversation during data gathering. Many respondents, mostly the better skilled, stated their intention to leave the community once their children reached junior high school age.

The unmarried, unskilled/semi-skilled registered the largest proportion of concern over poor accommodation, although it can be seen that this issue was also salient among the married respondents, regardless of occupation. The former group, and to a lesser extent the other single respondents, also disliked being away from home; this was particularly noticeable among the males. Far fewer of the married respondents expressed this concern; in fact among the married, skilled blue-collar migrants it was a non-issue.

Geographic isolation is regularly cited by researchers as a major issue with respect to SRICs. Their claim finds some support here. Married respondents, particularly among the skilled/professional white-collar group, expressed concern over poor access

Table 6.19

Dislikes About Living in the Community. Crosstabulation
of Occupation and Variable 89A by Marital Status.
Total Sample.

		Dislikes												
		Occupation by Marital Status												
		N	1	2	3	4	5	6	7	8	9	10	11	12
Unskilled/semi Skilled:														
Married	(68)	10.5%	—	—	7.0%	3.5%	14.0%	7.0%	12.3%	8.8%	12.3%	5.3%	15.8%	3.5%
Unmarried	(38)	9.4%	—	—	—	6.3%	18.8%	12.5%	3.1%	25.0%	—	3.1%	21.9%	—
Skilled blue-collar:														
Married	(54)	4.7%	2.3%	—	—	2.3%	23.3%	9.3%	9.3%	14.0%	23.3%	—	11.6%	—
Unmarried	(25)	—	—	—	—	—	33.3%	33.3%	4.8%	4.8%	—	9.5%	9.5%	4.8%
Skilled/prof white-collar:														
Married	(32)	3.7%	—	—	—	—	—	—	14.8%	7.4%	37.0%	14.8%	7.4%	3.7%
Unmarried	(20)	5.9%	—	—	—	—	—	17.6%	35.3%	11.8%	—	—	17.6%	11.8%

- 10. Climate
- 11. Away from home
- 12. Small communities
- 1. The Job
- 2. Employer
- 3. Co-Workers
- 4. People in community
- 5. Recreation facilities
- 6. Entertainment facilities
- 7. Poor Access
- 8. Accommodation
- 9. Schools

to major urban centers. However, this is much less of an issue among the less skilled single respondents. Other related factors, such as the climate, people in the community, and living in small communities, were not generally considered important. Dislike of the climate was largely confined to the better skilled while the less skilled, particularly the unmarried, seemed more inclined to dislike people in the community. Surprisingly few people disliked living in a small community, per se.

The inadequacy of school facilities was an issue only among married respondents, although the proportion of concern increased, at least among the blue-collar migrants, with skill levels. The lower concern among the skilled/professional white-collar migrants probably reflects a lower proportion of these migrants who had children or children still living at home.

Undoubtedly the most significant feature emerging from this variable was the minimal dislike of wages and the workplace. But consistent with other related data, the less skilled, regardless of marital status (and sex), were more inclined to dislike the job than the other occupational groups. The married unskilled/semi-skilled were the only group to register a dislike of co-workers. Less than 1 percent of all the respondents disliked their employer. Overall, the work environment was not a contentious area of concern for any of the respondents except, perhaps, a few among the unskilled/semi-skilled.

Controlling for sex of respondent produced few deviations from the combined-sex distributions. It will be recalled that nearly 67 percent of the females were either unskilled or semi-skilled (mostly the latter), and they tend to reflect male concerns for this occupational group, notwithstanding marital status. A higher proportion of females disliked the climate and a much higher proportion than males complained about inadequate recreation facilities. Oddly, regardless of marital status they seem to have been less upset about being away from home than their male counterparts (9.1 versus 20.9 percent).

Likes: Table 6.20 shows the distributions of factors which respondents liked most about living in their respective communities. Regardless of marital status, wages, the job, the employer, co-workers, people in the community, and living in a small community were all 'liked' more than 'disliked.' However, it is clear that wages were more liked than anything

Table 6.20

Likes About Living in the Community. Crosstabulation of Occupation and Variable 94A by Marital Status.
Total Sample.

else. In terms of most salient issues the occupational groups differed rather significantly. Skilled/professional white-collar migrants tended to stress the job and co-workers rather than wages, whereas for the blue-collar migrants, and in particular the less skilled, the reverse was apparent. Wages tended to be more salient for the unmarried than married respondents. Moreover, the former were more likely to like their co-workers, whereas the latter were more likely to like people in the community. Notwithstanding marital status there is something of an inverse relationship between occupational skill levels and the importance attached to wages, and a positive relationship between skill levels and the importance attached to the job.

But while all occupational groups, married and unmarried, were generally positive about wages and the job itself, they were less so about their respective employers. It might have been expected that the more highly skilled would have identified more closely with upper level management than their less skilled subordinates; however, superficially almost the reverse is apparent. This anomaly was solved by separating the unskilled from the semi-skilled and controlling for sex of respondent. It appears that a higher proportion of females in the semi-skilled white-collar group liked their employer, thus producing something of a spurious relationship. Generally, the females were not enthusiastic about the career aspects of the workplace. Rather, they identified the social dimension of their jobs, co-workers, and people in the community as more salient. They were more enthusiastic than males about living in small communities, despite the fact that they complained more than males about inadequate recreation, service, and retail facilities.

Assessment of Community Prospects

Most respondents were fairly optimistic about the future of their respective communities, although those living in the oil and gas based communities (with the exception of Rainbow Lake) were somewhat more positive than those living in Grande Cache, which is largely dependent upon coal extraction. However, it should be noted that during the data gathering stage of this study, a labor dispute with McIntyre Mines, the major employer, was threatening to cause a strike which the employees and those of the ancillary businesses, after a long recession in the coal industry, could ill afford. Consequently, opinions about Grande Cache's future were somewhat soured among the blue-collar workers. Nevertheless, only 16.9 percent of the total sample rated their

Table 6.21

Influence of Relatives on the Decision to Move. Crosstabulation of Occupation and Variable 87 by Marital Status. Total Sample.

Occupation by Marital Status	N	Extent of Influence			
		Great	Some	Not Much	None
Unskilled/semi-skilled					
Married	(72)	10.0%	26.7%	20.0%	43.3%
Unmarried	(41)	11.8%	26.5%	20.6%	41.2%
Skilled blue-collar					
Married	(56)	8.5%	21.3%	14.9%	55.3%
Unmarried	(26)	9.1%	31.8%	9.1%	50.0%
Skilled/prof. white-collar					
Married	(35)	3.4%	13.8%	20.7%	62.1%
Unmarried	(20)	5.9%	5.9%	7.6%	70.6%

community's prospects as 'poor.'

Generally, the blue-collar groups were more positive than the skilled/professional white-collar migrants. This was particularly noticeable in the skilled blue-collar group. Marital status accounted for almost no variation. However, it was suspected that as a temporal corollary of decision rationalizing, length of residence might intervene in this relationship. This was found to be the case, although there is some co-variance with age. Those who had been in their respective communities less than a year were less optimistic than those who had been there over four years. A loose linear relationship existed between these two variables among the less skilled, although not among the skilled/professional white-collar migrants. Assessments of the latter tended to decline after the second year, which perhaps explains why there were proportionately fewer of this group who had been in their respective communities longer than two years. Comparing blue and white-collar migrants, then, it seems that optimism increases over

time for the former, but starts fairly high and declines more rapidly among the latter. Considering these findings with other data, it would seem that the skilled white-collar migrants view working in an SRIC as a 'career challenge,' while blue-collar migrants, especially the less skilled, accept it as another facet of the job search.

The Decision to Move

Respondents were asked a number of questions relating to the influence of friends and relatives on their decision to move. However, it must be acknowledged that relatives would not necessarily be present in the immediately previous place of residence, although the extent to which their influence may be diminished by this fact is debatable. The data suggest that friends were more influential than relatives. In answer to Variable 87 (influence of close relatives), slightly more than half (51.2 percent) of the respondents stated that relatives had no influence on their decision to move. Only 8.6 percent acknowledged this influence was 'great.' Table 6.21 shows there was very little variation in terms of occupational skill levels and marital status. The less skilled seem to have been influenced the most, while the skilled/professional white-collar migrants were influenced the least. The unmarried blue-collar migrants were slightly more influenced than their married counterparts, but the interpretation was not significant. Moreover, neither sex (of respondent) nor age accounted for any meaningful variation, except to the extent that females, as previously pointed out, comprised a very large proportion of the semi-skilled white-collar groups.

The *thought* of leaving relatives (Variable 86) shows a similar distribution of scores (Table 6.22). Overall, the thought of leaving relatives was more pronounced than the *influence* relatives had on the decision-making process. But in this instance the occupational relationship was much more specified by marital status. While very few differences were found among the unmarried respondents in terms of occupation, there were differences among those who were married. Generally, the unmarried were more affected by the thought of leaving relatives than the married. It can be seen that the least affected were the skilled blue-collar group and the most affected were the unskilled/semi-skilled (especially among the females). The thought of leaving relatives was more salient for the skilled/professional white-collar group than expected; however, this was largely accounted for by the younger members of the group.

Table 6.22

Thought of Leaving Relatives. Crosstabulation of Occupation and Variable 86 by Marital Status. Total Sample.

Occupation by Marital Status	N	Extent of Influence			
		Great	Some	Not Much	None
Unskilled/semi skilled:					
Married	(72)	15.0%	30.0%	15.0%	40.0%
Unmarried	(41)	17.6%	38.2%	17.6%	26.5%
Skilled blue-collar:					
Married	(56)	2.1%	19.1%	27.7%	51.1%
Unmarried	(26)	13.6%	27.3%	18.2%	40.9%
Skilled/prof. white-collar					
Married	(36)	6.9%	31.0%	41.4%	20.7%
Unmarried	(30)	11.8%	17.6%	23.5%	47.1%

Controlling for prior residence location produced some interesting results. Those who had immediately previously been living in Alberta were generally not so affected by this factor as those who had been living elsewhere. The thought of leaving close relatives weighed most heavily for migrants from the Maritimes, Quebec, and Ontario. But here again it must be remembered that most of the discrimination was based on occupational skill levels, and those who had been living outside Alberta tended to be less skilled and less likely to be married than those who had been living in the province.

Respondents were also asked whether relatives at point of origin were for or against their move, or indifferent to it (Variable 88). Proportionately few (11.5 percent) were against the move. Controlling for marital status showed few differences among those who were married. The highest proportion of relatives for the move were found among the skilled/professional white-collar group (51.7 percent); the lowest proportion was found among the married skilled blue-collar group (27.7 percent). At the same time

indifference was highest in the latter group (66 percent). The proportion of relatives for the move was consistently fairly high among the unskilled/semi-skilled, regardless of marital status. Generally, the relatives of unmarried migrants were more likely to be for the move than the relatives of those who were married. A higher proportion of females than males reported that their relatives were against the move (33.4 compared to 18.3 percent).

These findings again tend to support the literature with respect to stronger family ties among the less skilled/educated. Such ties, while based more on 'dependence' than purely emotional factors, represent a significant friction to migration, contributing to the phenomenon of 'psychic cost.' Nevertheless, the data also suggest that marriage diminishes family ties somewhat, possibly by shifting the focus of dependence and broadening kinship linkages.

The influence of close friends at point of origin (Variable 90) on the decision to move is shown in Table 6.23. It can be seen that their influence was stronger than the influence of relatives. This was to be expected, since friendships, unlike kinship ties, are likely to be established at all places of residence. While not statistically significant, unmarried respondents were more influenced by friends than those who were married. Very little variation is accounted for by occupation, age, or sex of respondent, although again females tended to be slightly more influenced by friends than males, all other factors being equal. Controlling for prior residence location produced a similar pattern to that produced by Variable 86. In terms of occupation, of those who claimed that friends had no influence on their decision to move the largest proportion was from the blue-collar groups. Fewer were from the skilled/professional white-collar group. The impression given here then, is that while the less skilled tend to be influenced in their decision to move by kinship ties, the better skilled are more influenced by friends- at least where any such influence exists.

Influence of Spouse on the Decision to Move

Married migrants appear to have received a fair amount of support from their husbands/wives (mostly wives) in the decision to migrate (Variable 85). In terms of occupational distinctions, however, distributions are characteristic of other related findings. Nearly 83 percent of the spouses of skilled/professional white-collar migrants

Table 6.23

Influence of Close Friends on the Decision to Move. Crosstabulation of Occupation and Variable 90 by Marital Status. Total Sample.

Occupation Group by Marital Status	N	Extent of Influence				Row Total
		Great	Some	Not Much	None	
Unskilled/semi-skilled:						
skilled:						
Married	(72)	15.0%	25.0%	18.3%	41.7%	100.0%
Unmarried	(41)	20.6%	29.4%	20.6%	29.4%	100.0%
Skilled/blue-collar:						
Married	(55)	2.1%	23.4%	27.7%	46.8%	100.0%
Unmarried	(26)	31.8%	36.4%	9.1%	22.7%	100.0%
Skilled/professional/white-collar:						
Married	(34)	6.9%	34.5%	31.0%	27.6%	100.0%
Unmarried	(20)	17.6%	29.4%	35.3%	17.6	100.0%

were supportive of the move, compared to 65.3 percent for the skilled blue-collar and 63 percent for the unskilled/semi-skilled migrants. Controlling for age of respondent produced no significant interpretation, although a slightly higher proportion of the younger (under 25) and older (over 30) respondents in the skilled blue-collar group stated that their spouses supported the move.

These migrants were also asked to what extent they had discussed the move with their spouses (Variable 71), and how much their spouses had influenced their decision (Variable 70). Only 12.5 percent stated that they had not discussed the move at all. Just under 45 percent said they had discussed the move 'a great deal.' The least amount of

discussion with spouses occurred among the unskilled/semi-skilled, although differences among occupational groups were not significant. It was found that respondents with urban backgrounds tended to discuss their move in greater detail than those with rural backgrounds. However, it must be remembered that the latter tended to be less skilled than those with urban backgrounds. Age produced some interpretation, but only among those with rural backgrounds; older, less skilled migrants tended to discuss their move in less detail than their younger counterparts.

Spouses seem to have had considerable influence upon the decision to move. Overall, 38.5 percent of the married respondents acknowledged that their spouses had a 'great deal' of influence on their decision, while a further 29.9 percent said their spouses had 'some' influence. Just over 20 percent said their spouses had no influence on their decision. While occupational skill levels explained very little variation it was found, again, that older migrants were less influenced by their spouses than those who were younger. Not surprisingly, married males were much less influenced by their spouses than married females. Further examination of the data revealed that approximately 76 percent of the married female respondents (whose husbands were living in the community with them) had moved because their husbands had obtained work in the community.

Levels of Insecurity Caused by the Move

Slightly more than 44 percent of the respondents stated that their move had caused moderate to high feelings of insecurity. Just under 28 percent had experienced no insecurity as a result of their move. In terms of occupational differences, the highest levels of insecurity were experienced by the semi-skilled blue and white-collar migrants, particularly those who were married. In fact, levels of insecurity were higher for married respondents, regardless of occupational skill levels. Feelings of insecurity were lowest among the unmarried skilled/professional white-collar and unmarried unskilled migrants. Table 6.24 gives distributions by occupation and marital status.

Very little variation was accounted for by age. However, it was found that respondents' backgrounds produced some specification. Overall, levels of insecurity were higher among those who had rural backgrounds, particularly within the unskilled/semi-skilled group. Nevertheless, there was a noticeable increase in levels of insecurity among the skilled blue-collar and skilled/professional white-collar migrants

Table 6.24

Insecurity Caused by Move. Crosstabulation of Occupation and Variable 91 by Marital Status. Total Sample.

Occupation by Marital Status	N	Level of Insecurity			
		Great	Some	Not Much	None
Unskilled/semi-skilled:					
Married	(72)	13.3%	41.7%	25.0%	20.0%
Unmarried	(41)	8.8%	38.2%	35.3%	17.6%
Skilled blue-collar:					
Married	(56)	2.1%	42.6%	19.1%	36.2%
Unmarried	(26)	4.5%	31.8%	31.8%	31.8%
Skilled/prof. white-collar:					
Married	(36)	6.9%	27.6%	24.1%	41.4%
Unmarried	(30)	5.9%	17.6%	41.2%	35.3%

with rural backgrounds. This effect persisted even after controlling for marital status. Distributions by occupation and background are given in Table 6.25.

Attitudes Toward the Work Environment

In order to learn more about migrants and the jobs they came to fill, a battery of questions were developed which focused upon several aspects of the work environment. Respondents were asked to indicate the degree of importance they attached to each criterion. Table 6.26 gives response distributions along an interval scale of low to high. It can be seen that respondents generally attached high importance to the work environment. Nevertheless, some variation was evident on the basis of occupation, marital status, and sex of respondent.

'How much the job pays' (Variable 72) was of prime concern to nearly all the sample with the exception of the skilled/professional white-collar migrants. Unmarried respondents were less concerned about this issue than their married counterparts.

Table 6.25

Insecurity Caused by Move. Crosstabulation by Occupation
and Variable 91 by Variable 35 (rural/urban background).
Total Sample.

Occupation by rural/urban background	N	Level of Insecurity			
		Great	Some	Not Much	None
Unskilled/semi-skilled:					
Urban	(35)	3.4%	44.8%	31.0%	20.7%
Rural	(71)	15.3%	35.6%	30.5%	18.6%
Skilled blue-collar:					
Urban	(23)	5.3%	31.6%	31.6%	31.6%
Rural	(55)	2.2%	45.7%	21.7%	30.4%
Skilled/prof. white-collar:					
Urban	(39)	6.1%	21.2%	24.2%	48.5%
Rural	(12)	9.1%	27.3%	54.5%	9.1%

Occupation specified 'Equipment necessary to do the job' (Variable 73) since, not surprisingly, this was less of an issue with white-collar workers. It seems to have enjoyed the highest priority among the skilled blue-collar workers.

While all the married occupational groups attached high importance to 'Job security' (Variable 74), the unmarried, and in particular the unmarried skilled/professional white-collar migrants, were much less concerned. Second least concerned among the unmarried were the unskilled/semi-skilled. 'Sufficient information from superiors to get the job done' (Variable 75) was important to the blue-collar migrants as a whole; much less so to the skilled/professional white-collar group. There was no significant variation on the basis of marital status, although the married respondents tended to be a little less concerned about this issue than their unmarried counterparts.

Table 6.26

Attitudes Toward the Work Environment Frequency Distributions on Variables 72-84. Total Sample.

Variable #	Description	Level of Importance Attached					N
		low 1	2	3	4	5 High	
72	(How much the job pays)	3.3%	2.4%	21.0%	36.2%	37.2%	(251)
73	(Equipment necessary to do the job)	7.7%	11.5%	24.5%	31.7%	25.0%	(250)
74	(Job security)	5.7%	2.9%	11.4%	32.6%	47.4%	(252)
75	(Sufficient information from superiors to get the job done)	3.8%	5.7%	26.7%	29.5%	34.3%	(251)
76	(A job that is varied and interesting)	2.4%	7.6%	14.8%	27.6%	47.6%	(252)
77	(Being able to see results from a job)	3.8%	4.5%	14.5%	27.6%	49.5%	(252)
78	(Friendly co-workers)	1.0%	1.4%	15.9%	31.9%	49.8%	(250)
79	(Competent co-workers)	3.3%	4.3%	12.9%	32.9%	46.7%	(252)
80	(Competent supervisors)	3.8%	3.5%	14.8%	26.7%	51.0%	(251)
81	(Clearly defined job responsibilities)	3.8%	6.9%	19.3%	27.6%	42.4%	(250)
82	(Opportunity to use individual initiative)	5.7%	4.8%	11.4%	21.9%	55.7%	(250)
83	(Job safety)	4.4%	2.9%	9.7%	26.7%	56.3%	(249)
84	(Working in a job without close supervision)	4.8%	6.7%	14.8%	23.8%	50.0%	(251)

Working in 'A job that is varied and interesting' (Variable 76) was clearly of the greatest importance to the skilled/professional white-collar migrants, regardless of marital status. The blue-collar groups were less concerned; the unmarried, unskilled/semi-skilled even less so. Similarly, 'Being able to see results from a job' (Variable 77) was less important to the less skilled, especially among the females and the unmarried. Married skilled/professional white-collar migrants attached the highest importance to this issue.

Having 'Friendly co-workers' (Variable 78) was of the greatest importance to the skilled/professional white-collar and skilled blue-collar migrants. Marital status in this case accounted for very little variation, although unmarried respondents rated the issue slightly higher than their married counterparts. A similar but less pronounced pattern was evident with respect to having 'Competent co-workers' (Variable 79). Generally the lowest importance attached to this issue was indicated by the unskilled/semi-skilled females. All occupational groups rated the necessity of 'Competent supervisors' (Variable 80) fairly highly. But again unmarried respondents attached slightly less importance to this than their married counterparts. The unskilled/semi-skilled, regardless of marital status, were also less concerned about supervision than the other groups, although these differences were not significant.

Having 'Clearly defined job responsibilities' (Variable 81) was specified to a small degree by occupation, marital status, and sex of respondent. It was a more salient issue with the skilled/professional white-collar migrants, and generally more salient with those who were unmarried. Females were less concerned with this issue than males. The 'Opportunity to use individual initiative' (Variable 82) was also more important to the skilled/professional white-collar migrants; less so to the blue-collar groups, particularly among the married.

'Job safety' (Variable 83), not surprisingly, was generally more important to the blue-collar migrants, especially among the skilled and unskilled, regardless of marital status. The semi-skilled, it must be remembered, were largely white-collar females. Nevertheless, marital status specified occupational differences, with the separation in attitudes being more clearly defined among the unmarried migrants. For some reason, possibly because of their positions of responsibility, unmarried skilled/professional

white-collar respondents were more concerned about job safety than the unmarried blue-collar workers. From the standpoint of 'Working on a job without close supervision' (Variable 84), the skilled blue-collar migrants, especially those who were married, regarded this issue as more important than the others. However, few differences were apparent among the married occupational groups. Marital status produced some specification; unmarried unskilled/semi-skilled migrants were much less concerned about this issue than their unmarried skilled blue and white-collar counterparts. Unmarried females tended to be less concerned about working without close supervision than those who were married.

Apart from one or two isolated instances, respondents' age accounted for very little variation among any of these criterions. Older respondents tended to be slightly more 'conservative' than those who were younger, but differences were not significant. Overall, these findings suggest that the better skilled migrants have a somewhat stronger work ethic than the less skilled, with the unmarried respondents among these groups being a little more 'initiative conscious' than their married counterparts. Conversely, the unmarried better skilled migrants were less concerned about pay and job security than those who were married. To some extent the findings support the literature in that the less skilled show some indication of being more footloose than the better skilled. However, it is clear that marital status overrides these differences to some extent. Employers seem to be correct in placing a higher priority on married employees. The low importance of respondents' age as an explanatory variable is curious since, as the following section notes, it emerges much more strongly in terms of satisfaction with the decision to move and satisfaction with the community environment. Of course, age factors are to some extent implicit in marital status; married respondents tended to be slightly older than those who were unmarried.

Membership in Trade/Professional Unions and Associations

Membership in trade unions and professional associations was found to vary considerably among the four sample communities. Essentially this was due to the nature of their industries. The oil and natural gas developers do not encourage the unionization of employees directly concerned with their operations. This is certainly reflected in the data for Rainbow Lake, Swan Hills, and to a lesser extent Fox Creek. The coal mining

industry is much more unionized and the effect of this can be seen in the data for Grande Cache. Table 6.27 gives response distributions by occupational skill levels for the four communities.

Except for Grande Cache the less skilled were generally less unionized than the other groups. However, the lowest proportion of unionization was among the semi-skilled white-collar migrants who, as previously noted, were largely females involved in clerical/secretarial duties. In Rainbow Lake there was virtually no unionization apart from some association membership among the skilled/professional white-collar migrants. Swan Hills showed somewhat higher levels of unionization, particularly among the skilled blue-collar and skilled/professional white-collar groups. Fox Creek was evenly split, although again it can be seen that a higher proportion of skilled blue-collar and skilled/professional white-collar than unskilled/semi-skilled blue-collar migrants were unionized. In contrast, just over 85 percent of the latter in Grande Cache belonged to a union. In all, nearly 85 percent of the respondents from this community were unionized. Age of respondent interpreted these relationships somewhat; apart from the skilled blue-collar group, older respondents were more likely to be unionized (or members of an association) than their younger counterparts.

Subscription to Trade and Professional Journals: The majority of respondents subscribed to some type of trade or professional journal. Fewer unskilled/semi-skilled migrants subscribed than the more highly skilled—48.9 percent compared to 59.4 and 67.4 percent for the skilled blue-collar and skilled/professional white-collar groups respectively. Only one female, who was a chartered accountant, subscribed to a professional journal. Age accounted for some variation among the less skilled, with a slightly higher proportion of older respondents subscribing. However, overall, age was not a significant factor.

Why They Moved

The reasons why people move to SRICs are as varied as the people themselves. But again, some systematic differences can be observed among occupational groups. Generally, all occupational groups placed some emphasis on economic factors; however, this was particularly noticeable among the unmarried and most particularly among the unmarried unskilled/semi-skilled. Most of these respondents moved to get a job, a better

Table 6.27

Membership in Trade/Professional Associations. Crosstabulation
of Occupation and Variable 37 by Community.

Occupational Group	Community											
	Fox Creek		Grande Cache		Rainbow Lake		Swan Hills					
N	Yes	No	N	Yes	No	N	Yes	No	N	Yes	No	
Unskilled	(8)	33.3%	66.7%	(5)	66.7%	33.3%	(2)	—	100.0%	(0)	—	—
Semi-skilled blue-collar	(11)	44.4%	55.6%	(25)	95.2%	4.8%	(5)	—	100.0%	(30)	19.2%	80.8%
Skilled blue-collar	(28)	62.5%	37.5%	(11)	88.9%	11.1%	(3)	—	100.0%	(41)	35.3%	64.7%
Semi-skilled white-collar	(11)	11.1%	88.9%	(5)	33.3%	66.7%	(6)	20.0%	80.0%	(8)	—	100.0%
Skilled white-collar	(16)	53.8%	46.2%	(5)	66.7%	33.3%	(5)	33.3%	66.7%	(13)	27.3%	72.7%
Professional white-collar	(10)	66.7%	33.3%	(0)	—	—	(2)	—	100.0%	(8)	66.7%	33.3%

job, or to make some quick money. It can be seen that as occupational skill levels increase, primary motivations move towards career issues. Among the skilled blue-collar and skilled/professional white-collar migrants the most important reason for moving, regardless of marital status, was to get a 'more interesting' job. But it can be seen in Table 6.28 that simply 'getting a job' was also a salient issue among the unmarried skilled/professional white-collar migrants. There is a corresponding *broadening* of motivations as occupational skills increase. Family ties were a significant factor for the semi-skilled group, especially among the semi-skilled white-collar migrants who, it will be recalled, were largely females. A significant proportion of the skilled/professional white-collar migrants (particularly those who were married) had been transferred, a factor which, not surprisingly, declines noticeably with skill levels.

Controlling for immediately previous residence location provided some interpretation. Unlike the less skilled who had been living in Alberta, a fairly high proportion of those with similar skill levels who had been living elsewhere cited the quest for a more interesting job. Similar patterns were evident for the skilled blue-collar migrants. Conversely, nearly 45 percent of the skilled/professional white-collar migrants who had previously been living elsewhere stated they were moving primarily to get a job or a better job. Moreover, of those citing family reasons for moving twice as many had been previously living outside Alberta. Nevertheless, it can be seen that, overall, the most important reasons for moving to the four communities included in this study were to get a job or a better job.

Summary

While these data lend limited support to the popular stereotype of migration to SRICs, there are clearly several important exceptions. Although most migrants were young, a high proportion were married and had children under the age of eighteen still living at home. They also tended to be better educated than the literature suggests. Most had only limited migratory experience and only a third had worked in an SRIC before. Moreover, a surprisingly high proportion said they had procured a job prior to moving. If there is such a phenomenon as a 'typical SRIC workforce', it would more likely be found among the skilled blue-collar migrants. While they tended to be 'more married' than the other occupational groups, and more likely to have children still living at home, they also

Table 6.28

Most Important Reason for Moving, Crosstabulation of Occupation and Variable 97 by Marital Status. Total Sample.

		Reasons for Moving											
Occupation by Marital Status		N	1	2	3	4	5	6	7	8	9	10	11
Unskilled/semi-skilled:													
Married	(71)	23.7%	3.4%	28.8%	8.5%	13.6%	1.7%	8.5%	—	—	—	3.4%	8.5%
Unmarried	(41)	32.4%	8.8%	29.4%	—	5.9%	5.9%	2.9%	—	—	—	—	11.7%
Skilled blue-collar:													
Married	(56)	17.0%	2.1%	19.1%	10.6%	23.4%	2.1%	2.1%	—	—	—	—	23.4%
Unmarried	(25)	19.0%	—	28.6%	4.8%	28.6%	4.8%	—	—	—	—	—	14.4%
Skilled/prof white-collar:													
Married	(35)	6.9%	3.4%	10.3%	17.2%	24.1%	6.9%	3.4%	—	—	6.9%	—	17.1%
Unmarried	(20)	23.5%	5.9%	11.8%	11.8%	29.4%	5.9%	5.9%	—	—	—	—	—

1. To get a job
2. Make quick money
3. Better job
4. Transferred
5. More interesting job
6. See Canada
7. Spouse got job here
8. To work in small community
9. To get away from family
10. Spouse transferred here
11. Other

had more migration and SRIC experience. At the same time, however, they tended to remain in a community longer and were less likely to change jobs after arriving.

There were some systematic relationships between occupational skill levels and demographic backgrounds. The four communities studied here attracted a slightly higher proportion of migrants from regions outside than within Alberta. They tended to be less skilled and less likely to be married than migrants who had previously been living in Alberta. A high proportion of the blue-collar migrants had rural backgrounds; in turn an even higher proportion of those with rural backgrounds had been born and raised on a farm. These figures contrast sharply with the skilled and professional white-collar migrants, who largely had urban backgrounds. The less skilled, particularly those who were unmarried, tended to be younger than average, less likely to have procured a job prior to arrival, and had for the most part been in their respective communities for shorter periods of time than the other occupational groups.

Overall, migrants were not satisfied with community life. But their complaints tended to vary on the basis of occupational skill levels and marital status. Generally, the married, more highly skilled migrants were critical of their community's physical infrastructure, such as schooling and retail/service facilities, while the less skilled, particularly the unmarried, tended to be more critical of social relations within the community. The unmarried, unskilled/semi-skilled registered the largest proportion of complaint over accommodation, but this was an issue with all occupational groups, regardless of marital status.

The workplace was more appreciated than the community. However, the more highly skilled tended to stress the job and co-workers, whereas the less skilled were preoccupied with wages. Very few migrants were positive about their employer; in fact, on this issue they tended to be mostly indifferent. Better skilled unmarried migrants, while demonstrating a somewhat stronger work ethic than their married counterparts, were less concerned about wages and job security. Married respondents, especially the more highly skilled, tended to be more conservative in their outlook. For the most part, females placed much less emphasis than males on career aspects of the work environment, stressing instead its social dimension and that of the community.

The majority of respondents moved for economic reasons, mostly to get a job or a better job. However, a significant proportion of the more highly skilled, especially among those who were married, indicated they were moving in order to procure a more interesting job. From the standpoint of predicting manpower stability, then, the findings are somewhat contradictory. While the married skilled workers generate a picture of stability in terms of their attitudes toward the job and community, it is clear that the skilled blue-collar migrants, who are in effect the backbone of an SRIC workforce, are no less migratory than the less skilled, even though they may remain in one place a little longer.

VII. INFERENTIAL DATA ANALYSIS

A. The MIRO Test Battery

It will be recalled that in developing the MIRO test, issues of validity and reliability were considered to be of major importance. Kerlinger¹ notes three types of validity: content, criterion, and construct. The latter, in effect, asks what factors account for variance in test scores. Criterion validity deals with how well a test predicts the real-life situation. Issues of sample randomness and the nature of bias relate to content validity.

The design of the MIRO test addressed problems of variation among test scores (construct validity) by predeveloping the three reference other typologies. The degree to which discriminant analysis was able to correctly classify the occupational groups into the three reference other categories (degree of 'best fit') revealed information about the proportion of groups which were not 'correctly' classified. Other questions in the survey instrument (variables 50 and 57), which asked respondents to identify their most significant sources of information in the job search process, were intended to deal with criterion-related validity. Reliability of the test battery was assessed from the within-group standard deviations. These coefficients were also used to determine the precise nature of the reference other relationship for each occupational group.

Total-Sample Results

The SPSS subprogram Discriminant Analysis was selected as a method of determining whether the MIRO test battery was successful in separating the occupational groups on the basis of the three reference other typologies. Several exploratory runs were conducted, each either treating the occupational groups discretely or in combinations. This exploratory work and the testing of all hypotheses except those relating to the use of mass media as a surrogate for migrant stock utilized the total sample ($n = 252$). It quickly became apparent that, at least from the standpoint of salient reference others, the blue-collar occupations were remarkably homogeneous in their affiliations. Moreover, the semi-skilled white-collar group showed a consistent similarity to the blue-collar categories. The skilled and professional white-collar groups were also highly homogeneous in this context.

¹Fred N. Kerlinger, *op. cit.*, pp. 456-476.

The alternatives were narrowed down to two occupational combinations. The first, a three-group arrangement, comprised unskilled and semi-skilled blue- and white-collar workers in Group 1, skilled blue-collar workers in Group 2, and the skilled/professional white-collar workers in Group 3. The second arrangement combined all the blue-collar and semi skilled white-collar workers into Group 1, and the skilled/professional white-collar workers into Group 2, thus producing a dichotomy. In the 3-group test the average Wilks Lambda derived from the three reference other analyses was .80 after removal of the first function. This coefficient rose to .88 on the 2-group test. Both coefficients indicate that there was very little information remaining following the zero discriminant function.

It can be seen from the discriminant tables in the Appendix that while the 3-group occupational arrangement revealed some interesting descriptive detail, the test battery failed to discriminate on this basis. Close examination of the data revealed that the blue-collar and semi-skilled white-collar occupations were too homogeneous to produce *statistically* significant separations. Consequently it was decided to use the 2-group combination for all hypothesis testing and the 3-group combination for descriptive analysis.

The Adoption of Salient Reference Others

It was hypothesized that the adoption of reference others by migrants to SRICs would vary systematically with a community's stage of development. Specifically, newer communities would be less likely to possess an effective migrant stock than older communities. In which event it was expected that mass media would be utilized as a surrogate for migrant stock in information search behavior by those who would otherwise subscribe to a migrant stock. To permit testing of this hypothesis the four sample communities were combined into two groups. Group 1 (Fox Creek and Grande Cache) represented older communities, while Group 2 (Rainbow Lake and Swan Hills) represented newer communities.

While the mass media criterion variables failed to significantly separate the two occupational groups at the total sample level, introduction of 'community' as a control variable produced noticeable specification. Table 7.1 shows a statistically significant discriminant function (at better than .01) in Group 2, which comprises the newer

Table 7.1

Discriminant Analysis: Mass Media
Community Group 2 (Rainbow Lake/Swan Hills)

Function	Eigen value	% Variance	Canonical Correlation	After Function	Wilks' Lambda	χ^2	DF	Sig
1	.371	100	.520	0	.729	29.043	12	.003
<hr/> <i>N = 120</i> <hr/>								

communities. However, examination of the associated histogram and classification table reveals that it was the skilled/professional white-collar workers who provided most of the separation. Canonical discriminant functions evaluated at the group centroids produced a coefficient of -.310 for occupation Group 1 (indicating a weak negative relationship), and 1.169 for occupation Group 2 (indicating a strong positive relationship). In all, discriminant analysis was able to 'correctly' classify 78 percent of the grouped cases (see Table 7.2). No statistically significant discrimination on the basis of mass media was found in community Group 1 (Fox Creek/Grande Cache). However, it can be seen from Table 6.32 that a higher proportion of blue-collar workers utilized mass media in the latter communities. A total of 66 percent of the grouped cases were correctly classified. The canonical discriminant functions for this community group were .226 for occupation Group 1 (blue-collar) and -.761 for occupation Group 2.

Table 7.4 presents the pooled within-groups correlations of the 12 criterion variables developed for this reference other typology. Essentially these coefficients reveal how well, or poorly, each criterion variable discriminates among the occupational groups. The coefficients are derived from correlations between canonical discriminant functions and discriminating variables and are stacked in descending order of magnitude. In this instance it can be seen that the 'function' dimension provided most of the discrimination, followed by 'role' and then 'credibility.'

These findings are supported to some extent by other data. Migrants were asked if they had friends and/or relatives already at destination prior to their arrival. Tables 7.5 and

Table 7.2

Discriminant Analysis. Classification Results: Mass Media
Community Group 2 (Rainbow Lake/Swan Hills)

Actual Group	# of Cases	Predicted Group Membership	
		Group 1	Group 2
1 (blue collar)	95	81.0%	19.0%
2 (skilled/prof. white-collar)	25	33.3%	66.7%

Summary Statistics: 78.0% of grouped cases correctly classified

Table 7.3

Discriminant Analysis. Mass Media
Community Group 1 (Grande Cache/Fox Creek)

Function	Eigen value	% Variance	Canonical Correlation	After Function	Wilks' Lambda	X ²	DF	Sig
1	.176	100%	.387	0	.850	16.355	12	.175
N = 132								

7.6 show that a higher proportion of respondents had such connections in community Group 1 than those migrating to community Group 2. The data are particularly significant with respect to inter-community group occupational differences. It will be noticed that a much lower proportion of skilled/professional white-collar workers in both community groups had friends and relatives already at destination than did their blue-collar counterparts.

Table 7.4

Pooled Within - Groups Correlations Between Canonical Discriminant Functions and Discriminating Variables: Mass Media Community Group 2

Criterion #	Function	Dimension	Type	Trait #
2.3.1	.440	Function	Comparative	1
2.3.3	.360	Function	Normative	1
2.1.2	.360	Role	Role-Specific	2
2.2.4	.360	Credibility	Generalized	2
2.1.1	.310	Credibility	Role-Specific	1
2.3.2	.295	Function	Comparative	2
2.2.1	.231	Credibility	Job-Specific	1
2.2.2	.191	Credibility	Generalized	1
2.3.4	-.145	Function	Normative	2
2.1.4	.133	Role	Generalized	2
2.2.3	.076	Credibility	Job-Specific	2
2.1.3	.047	Role	Generalized	1

Canonical Discriminant Functions Evaluated at Group Centroids:

Group 1 (blue-collar): -.310

Group 2 (skilled/prof. white-collar): 1.169

See the MIRO test battery in Appendix A for itemization of the criterion questions.

Utilization of a Migrant Stock

It was also hypothesized that the utilization of a migrant stock would be discriminated on the basis of educational/occupational characteristics. More specifically, a greater proportion of blue-collar than skilled/professional white-collar migrants would be expected to utilize a migrant stock in their information search behavior.

Testing of this hypothesis was conducted at the total sample level, using the 2-group occupational dichotomy as independent variable. However, for illustrative purposes the 3-group occupational arrangement will again be used. Discriminant analysis showed a clear separation between the two occupational groups on the basis of migrant stock (Table 7.7). This was statistically significant at better than .001. The canonical discriminant functions (evaluated at the group centroids) were .233 for the blue-collar occupational group (Group 1) and -.827 for the skilled/professional white-collar group (Group 2). This indicates a weak positive relationship for Group 1 and a moderately strong

Table 7.5
Relatives Already at Destination. Cross tabulation of Occupation
and Variable 24 by Community

Occupational Group	Community Group 1 (Older Communities)		Community Group 2 (Newer Communities)		N	Yes	No.
	N.	Yes	No	Relatives Already at Destination			
Blue-Collar	100	33.3%	66.7%	95	21.1%	4.8%	
White-Collar	30	4.0%	96.0%	25	4.8%	95.2%	
Column %	130	26.6%	73.4%	120	20.0%	80.0%	

Table 7.6
Friends Already at Destination. Crosstabulation of Occupation
and Variable 25 by Community.

Occupational Group	Community Group 1 (Older Communities)		Community Group 2 (Newer Communities)		N	Yes	No
	N.	Yes	No	Friends Already at Destination			
Blue-Collar	100	36.9%	63.1%	95	30.4%	69.6%	
White-Collar	28	12.5%	87.5%	25	19.0%	81.0%	
Column %	128	31.5%	68.5%	120	28.0%	72.0%	

negative relationship for Group 2. As Table 7.8 shows, the analytical program was able to 'correctly' classify 72 percent of the grouped cases, which is a fairly high proportion. Nevertheless, the weak relationship indicated for Group 1 required some explanation.

Table 7.7
Discriminant Analysis: Migrant Stock.
Total Sample

Function	Eigen value	% Variance	Canonical Correlation	After Function	Wilks' Lambda	χ^2	DF	Sig
1	.195	100	.404	0	.837	35.839	12	.0003
<hr/>								
N=251								
<hr/>								

Table 7.8
Discriminant Analysis. Classification Results: Migrant Stock
Total Sample. 2- Occupational Group Split

Actual Group	# of Cases	Predicted Group Membership	
		Group 1	Group 2
1 (blue collar)	195	71.2%	28.8%
2 (skilled/prof. white-collar)	54	23.9%	76.1%
<hr/>			
Summary Statistics: 72.5% of grouped cases correctly classified			
<hr/>			

Examination of the 3-group occupational arrangement showed that much of the problem lay in the skilled blue-collar group. It can be seen in Table 7.9 that the major separation is between groups 2 and 3. These data, together with the scattergram distribution, suggest less homogeneity among the skilled blue-collar workers than among their less skilled counterparts and that some are aligning themselves more significantly with the skilled/professional white-collar group. The canonical discriminant functions support this speculation. The coefficients for Group 1 increases to .47 with the removal of the skilled blue-collar workers, remains at .82 for Group 2, and drops to .092 for Group 3. The

Table 7.9

Discriminant Analysis. Classification Results: Migrant Stock
Total Sample 3 – Occupational Group Split

Actual Group	# of Cases	Predicted Group Membership		
		Group 1	Group 2	Group 3
1 (unskilled/ semi skilled)	112	57.4%	19.7%	23.4%
2 (skilled blue-collar)	83	30.4%	34.8%	34.8%
3 (skilled/prof white-collar)	54	13.0%	63.0%	23.9%

Summary Statistics: 51.2% of grouped cases correctly classified

pooled within-groups correlations between canonical discriminant functions and discriminating variables are given in Table 7.10. It can be seen that 'role' provided the greatest separation, followed by 'credibility' and then 'function.'

These findings are compatible with most other analytical procedures involving the occupational groups. Of all the unitary occupational groups the greatest proportion of variation, at least from the standpoint of reference other affiliation and community-related attitudes, was found within the skilled blue-collar group. Thus, while the core hypothesis relating to the utilization of a migrant stock can be supported, separation of the occupational groups in terms of this reference other is more correctly understood as a negative relationship on the part of skilled/professional white-collar workers. However, it is clear that dependence upon a migrant stock for migration-related information exhibits an inverse relationship with occupational skill levels, with unskilled and semi-skilled blue-collar workers utilizing friends and relatives at destination to a greater extent than their skilled counterparts.

Table 7.10

Pooled Within - Groups Correlations Between Canonical Discriminant Functions and Discriminating Variables: Mass Media.
Community Group 2

Criterion #	Function	Dimension	Type	Trait #
1.1.1	.509	Role	Role-Specific	1
1.2.1	.460	Credibility	Job-Specific	1
1.3.1	.405	Function	Comparative	1
1.2.2	-.334	Credibility	Generalized	1
1.1.2	.307	Role	Role-Specific	2
1.2.4	-.294	Credibility	Job-Specific	2
1.3.4	.133	Function	Normative	2
1.2.3	.121	Credibility	Generalized	2
1.1.4	-.114	Role	Generalized	2
1.3.3	.104	Function	Normative	1
1.1.3	-.092	Role	Generalized	1
1.3.2	-.035	Function	Comparative	2

Canonical Discriminant Functions Evaluated at Group Centroids:

Group 1 (blue-collar): -.310

Group 2 (skilled/prof. white-collar): 1.169

The Nature of the Migrant Stock Relationship

It will be recalled that the MIRO test battery was expected to yield information upon the nature of the relationship between migrants and their salient reference others. While no hypotheses were developed around expected relationships, they provide valuable insights which are difficult to derive by direct methods. Interpretations are based upon group standard deviations itemised by the discriminant analysis program. The standard deviation is one of several measures of dispersion about the means of interval variables. Although the MIRO test battery utilized ordinal scaling (to permit easier interpretation by respondents) there is precedent for assuming similar properties between interval and ordinal data where there is a fair sized sample and distribution approaching normality.¹ In this instance a lower coefficient on the summed traits for each reference other type is

¹See Bonnie H. Erickson and T.A. Nosanchuk, *Understanding Data*. Toronto: McGraw-Hill Ryerson Ltd., 1977, p. 167; Lauren H. Seiler and Richard L. Hough, "Empirical Comparisons of the Thurstone and Likert Techniques," in *Attitude Measurement*, ed. Gene F. Summers (Chicago: Rand McNally and Co., 1970).

interpreted as greater within-group consensus than higher coefficients in the alternative traits. These coefficients are derived from the 3-group occupational arrangement since they reveal more information than those derived from the 2-group split. Otherwise, the findings differ very little from one group arrangement to the other.

As might be expected, the role of friends and relatives at destination is more specific for Groups 2 and 3 than it is for Group 1 (see Table 7.11). This suggests that less-skilled blue-collar workers utilize migrant stock for a broader range of purposes than do other occupational groups. Some support for this interpretation can be found in the range of credibility, which it can be seen is more generalized than it is for the skilled blue-collar migrants. A high level of consistency is also apparent for the skilled blue-collar migrants who also utilized a migrant stock in their information search behavior. Friends and relatives appear to perform a more job-specific function for this group. For the limited proportion of skilled/professional white-collar migrants who utilized a migrant stock, this reference other typology seems to have had a role-specific function and a generalized credibility.

Surprisingly, migrant stock did not indicate a normative function for any of the occupational groups, at least from the standpoint of migration-related information search. These data suggest that for those to whom a migrant stock is a salient reference other, friends and relatives at destination are largely a source of job-related information. Some exception to this generalization is apparent among the unskilled and semi-skilled, who obviously rely on a migrant stock for moral support to a greater extent than the other groups.

The Nature of the Mass Media Relationship

Since the testing of hypotheses relating to the adoption of mass media as a surrogate for migrant stock was conducted at the 2-community group level, standard deviations were taken from these analyses. Controlling for community produced no significant variations from the total sample standard deviations in the migrant stock and employment network reference other typologies. However, some interesting variations were found in the mass media SDs.

Tables 7.12 and 7.13 itemize the standard deviations evaluated at the group centroids for both community groups. In Community Group 1 (older communities) mass

Table 7.11

Nature of the Migrant Stock Relationship. Total Sample
Derived from Group Standard Deviations

Dimension / Type	Occupational Group		
	Group 1	Group 2	Group 3
Role: Role-Specific (1.1.1)	.869	.964	.529
Role: Role-Specific(1.1.2)	<u>1.247</u>	<u>.688</u>	<u>.629</u>
Summed SD:	<u>2.116</u>	<u>1.652*</u>	<u>1.158*</u>
Role: Generalized (1.1.3)	1.272	.961	1.007
Role: Generalized (1.1.4)	<u>.797</u>	<u>.864</u>	<u>.835</u>
Summed SD:	<u>2.069*</u>	<u>1.825</u>	<u>1.842</u>
Credibility: Job-Specific (1.2.1)	.882	.946	.930
Credibility: Job-Specific (1.2.2)	<u>.938</u>	<u>.639</u>	<u>1.352</u>
Summed SD:	<u>2.116</u>	<u>1.652*</u>	<u>1.158*</u>
Credibility: Generalized (1.2.3)	.849	.885	.678
Credibility: Generalized (1.2.4)	<u>.938</u>	<u>.961</u>	<u>.947</u>
Summed SD:	<u>1.787*</u>	<u>1.846</u>	<u>1.525</u>
Function: Comparative (1.3.1.)	.797	.811	.294
Function: Comparative (1.3.2.)	<u>.912</u>	<u>.744</u>	<u>1.904</u>
Summed SD:	<u>1.709*</u>	<u>1.555*</u>	<u>1.198*</u>
Function: Normative (1.3.3.)	.923	.983	.979
Function: Comparative (1.3.4.)	<u>.925</u>	<u>.968</u>	<u>.964</u>
Summed SD:	<u>1.848</u>	<u>1.951</u>	<u>1.944</u>

*Denotes lowest summed coefficients in each dimension.

media appear to be both role and job-specific for skilled blue-collar and skilled/professional white collar workers. As might be expected this reference other typology had a fairly pronounced comparative function. However, in the newer communities, (Community Group 2) where mass media enjoyed greater salience, the relationship changes for the skilled/professional white-collar group, although not for the skilled blue-collar workers. As Table 7.13 shows, very high SDs were generated among

Table 7.12

Nature of the Mass Media Relationship. Community Group 1 (Older Communities) Derived from Group Standard Deviations

Dimension/Type	Occupational Group		
	Group 1	Group 2	Group 3
Role: Role-Specific (2.1.1)	.879	.977	.000
Role: Role-Specific (2.1.2)	<u>1.473</u>	<u>.929</u>	<u>.553</u>
Summed SD:	<u>2.352</u>	<u>1.759*</u>	<u>.553*</u>
Role: Generalized (2.1.3)	1.216	.863	.871
Role: Generalized (2.1.4)	<u>.987</u>	<u>.951</u>	<u>1.019</u>
Summed SD:	<u>2.203*</u>	<u>1.814</u>	<u>1.890</u>
Credibility: Job-Specific (2.2.1)	.965	.977	.663
Credibility: Job-Specific (2.2.2)	<u>.695</u>	<u>.783</u>	<u>.400</u>
Summed SD:	<u>1.660*</u>	<u>1.760*</u>	<u>1.063*</u>
Credibility: Generalized (2.2.3)	.988	.992	1.000
Credibility: Generalized (2.2.4)	<u>.953</u>	<u>.936</u>	<u>.925</u>
Summed SD:	<u>1.941</u>	<u>1.928</u>	<u>1.925</u>
Function: Comparative (2.3.1.)	.658	.683	.000
Function: Comparative (1.3.2.)	<u>1.375</u>	<u>.950</u>	<u>.943</u>
	<u>2.033</u>	<u>1.633*</u>	<u>.943*</u>
Function: Normative (2.3.3.)	.953	.899	.971
Function: Normative (2.3.4.)	<u>.933</u>	<u>.992</u>	<u>.817</u>
	<u>1.786*</u>	<u>1.891</u>	<u>1.787</u>

*Denotes lowest summed coefficients in each dimension.

the occupation and community groupings on this reference other. This indicates considerable lack of consensus in certain test scores among the Group 2 workers. The lack of consensus centered around criterion variables relating to the perceived role of mass media in diffusing information about the community of destination. Upon closer examination it was found that the bulk of disagreement came from disparities within the

Table 7.13

Nature of the Mass Media Relationship. Community Group 2 (Newer Communities) Derived from Group Standard Deviations

Dimension / Type	Occupational Group		
	Group 1	Group 2	Group 3
Role: Role-Specific (2.1.1)	.545	.701	.028
Role: Role-Specific (2.1.2)	<u>.823</u>	<u>.755</u>	<u>2.049</u>
Summed SD:	<u>1.368*</u>	<u>1.456*</u>	<u>2.077</u>
Role: Generalized (2.1.3)	.851	.639	.676
Role: Generalized (2.1.4)	<u>.980</u>	<u>.934</u>	<u>1.023</u>
Summed SD:	<u>1.831</u>	<u>1.573</u>	<u>1.699*</u>
Credibility: Job-Specific (2.2.1)	.714	.755	2.028
Credibility: Job-Specific (2.2.2)	<u>.747</u>	<u>.701</u>	<u>1.963</u>
Summed SD:	<u>1.461*</u>	<u>1.456*</u>	<u>3.991</u>
Credibility: Generalized (2.2.3)	.982	.996	2.685
Credibility: Generalized (2.2.4)	<u>.965</u>	<u>.990</u>	<u>.912</u>
Summed SD:	<u>1.947</u>	<u>1.986</u>	<u>3.597</u>
Function: Comparative (2.3.1.)	.515	.000	2.028
Function: Comparative (2.3.2.)	<u>.989</u>	<u>.979</u>	<u>1.963</u>
Summed SD:	<u>1.504*</u>	<u>.979*</u>	<u>3.991</u>
Function: Normative (2.3.3.)	.914	.999	.925
Function: Normative (2.3.4.)	<u>.961</u>	<u>.930</u>	<u>1.014</u>
Summed SD:	<u>1.875</u>	<u>1.929</u>	<u>1.939*</u>

*Denotes lowest summed coefficients in each dimension.

two communities comprising Group 2. The skilled/professional white-collar respondents in Rainbow Lake were generally less positive than their counterparts in Swan Hills. Apart from suggesting a lack of reliability among the relevant criterion variables there is a possibility that Rainbow Lake may not have received as much attention among the mass media as other communities. This community is geographically isolated, comparatively new in terms

of population take-off, and has a small permanent population. It may be that while 'newness' can mediate the development of a migrant stock, the effectiveness of mass media is compromised at the same time.

Selective Use of Mass Media in Information Search

Researchers have consistently claimed that the type of mass media used in the information search process varies systematically with receiver attributes. These were discussed in greater detail in Chapter 4. Accordingly it was hypothesized that of those utilizing mass media in this context the less skilled occupations would be more likely to rely on the electronic media (radio and television) than the skilled/professional white-collar group. Conversely it was hypothesized that the latter group would be more likely to rely on printed media (newspapers, periodicals, etc.) than their blue-collar counterparts.

The data support these hypotheses to a limited extent. However, as Table 7.14 shows, when respondents were asked to identify which source of information they utilized most when gathering facts about job opportunities at the community of destination, 90 percent of those who selected mass media identified newspapers. This is hardly surprising, since job opportunities are more highly specified in newspapers than in the electronic media. Nevertheless, whereas all the skilled/professional white-collar group selected newspapers, 13 percent of the blue-collar groups selected radio and television. This suggests, as does the literature, that lesser skilled migrants tend to be less job-specific in their information search behavior. Rather, as noted in Chapter Four, they seem to be more influenced by 'ambiences' generated by economic booms.

Other cross-referencing data are compatible with these findings. Respondents were asked to identify their usual source of national news. Table 7.15 shows the response distribution among the 3 re-combined occupational groups. It can be seen that Group 3 (the skilled/professional white-collar workers) utilized printed media to a much greater extent than the blue-collar groups. The unskilled/semi-skilled workers were more inclined to use the electronic media, particularly television, than the other groups. A similar question asked respondents to identify which mass medium they used for leisure (Table 7.16). Although television was by far the most popular medium of the alternatives offered, none of the unskilled/semi-skilled workers selected newspapers. There is, in fact, something of a linear trend among the three occupational groupings in terms of the use of newspapers

Table 7.14
Selective Use of Mass Media in Information Search.
Total Sample

Occupational Group	N	Media Alternatives		
		Newspapers	Radio	TV
1 (unskilled/ semi skilled)	73	88.0%	8.0%	4.0%
2 (skilled blue-collar)	55	85.0%	9.0%	6.0%
3 (skilled/prof. white-collar)	30	100%	-	-
Column %	168	90.0%	9.0%	5.0%

Table 7.15
Source of National News.
Crosstabulation of Occupation and Media Type.
Total Sample

Occupational Group	Media Type					N
	Newspapers	Magazines	Radio	TV	Other	
1 (unskilled/ semi skilled)	9.6%	1.1%	10.6%	75.5%	3.2%	112
2 (skilled blue-collar)	14.5%	5.8%	20.3%	58.0%	1.4%	85
3 (skilled/prof. white-collar)	37.0%	-	13.0%	50.0%	2	55
Column %	17.2%	2.4%	14.4%	64.1%	1.9%	252

Table 7.16
Mass Medium Used For Leisure.
Crosstabulation of Occupation and Media Type.
Total Sample

Occupational Group	Media Type					N
	Newspapers	Magazines	Radio	TV	Movies	
1 (unskilled/ semi skilled)	-	6.4%	6.4%	85.1%	2.1%	112
2 (skilled blue-collar)	10.3%	11.8%	4.4%	70.6%	2.9%	85
3 (skilled/prof. white-collar)	19.6%	8.7%	13.0%	56.5%	2.2%	55
Column %	7.72%	8.7%	7.2%	74.0%	2.5%	252

and television, in both variables, inter-group differences relating to the use of radio, both for news and leisure, are less systematic.

Post-Decision Satisfaction

A total of 17 questions related directly and indirectly to post-decision satisfaction were incorporated into the survey instrument. These ranged from general satisfaction with the decision to move, to levels of satisfaction with work and community environments. It was hypothesized that there would be a positive relationship between levels of satisfaction with the decision to move and occupational skill levels. While all 17 criterions were analyzed on this basis only one, 'Satisfaction with the personal decision to move' (Variable 52), was used to test the hypothesis. Criterions relating to spouse and children were analyzed with indicators comprised of only the married respondents. First stage testing was achieved by crosstabulating occupation, using the three-group combination, and the criterion variable. Since all the criterions were constructed with interval categories Eta² was used to measure the proportion of variance explained by the indicator. Statistical significance was determined by Chi square. All data were analyzed at the total sample level.

Examination of Table 7.17 shows little support for the first hypothesis. All other factors being equal, most respondents were generally satisfied with the decision to move. While unskilled/semi-skilled respondents indicated slightly lower levels of satisfaction than the other occupational groups, differences were not statistically significant at the .05 level. Similar patterns can be observed with respect to the other criterions. Summary statistics are given in Table 7.18. The only statistically significant discriminations based upon occupation were found among variables dealing with the work environment. Blue-collar workers, particularly the less skilled, felt themselves less accepted by co-workers than the skilled/professional white-collar group (Table 7.19). They were also less satisfied with the work environment generally (Table 7.20), with job variety (Table 7.21), and with the employer's attitude toward job safety (Table 7.22). In view of the nature of the work the latter finding is hardly surprising; manual workers are usually more drastically affected by on-the-job conditions. However, it was noted in the previous section that the skilled/professional white-collar workers took this issue quite seriously, possibly as a function of their accountability in these matters.

Closer examination of the bivariate crosstabulations shows that, while not statistically significant, levels of satisfaction among the less skilled were lower on issues relating to the workplace and community environment. These findings, it will be recalled, enjoy considerable support from the descriptive section of this chapter. However, blue-collar workers, although generally critical of retail and service facilities in the community, were somewhat less critical than the skilled/professional white-collar group. Thus, the data suggest lower levels of alienation among the skilled blue-collar and skilled/professional white-collar migrants. But tolerance of the community's physical infrastructure seems to be slightly higher among the less skilled.

Intervening Variables

The analyses discussed above are bivariate and as such preclude the possible intervention of higher order variables. It was hypothesized on Chapter Four that length of residence would specify levels of satisfaction with the decision to move. In other words, while there may be systematic relationships between occupational skill levels and levels of satisfaction, length of residence would significantly override any variation based on occupation. This proposition derives from the literature, which recognizes a rationalizing

Table 7.17
Crosstabulation of Occupation and Variable 52
(Satisfaction with the decision to move).
Total Sample

Occupational Group	N	Level of Satisfaction				
		low 1	2	3	4	5 High
Unskilled/ semi-skilled	112	9.6%	11.7%	21.3%	28.7%	28.7%
Skilled blue-collar	83	5.8%	5.8%	20.3%	31.9%	36.2%
Skilled/prof. white collar	55	2.2%	13.0%	15.2%	39.1%	30.4%
Column %	250	6.7%	10.0%	19.6%	32.1%	31.6%

$\chi^2 = 6.938$ 8 df. Sig = .543 Eta² = .014

process accompanying all decision-making, particularly when there are frictions (physical or psychological costs) to changed courses in direction. Again, Variable 52 was used to test this hypothesis, utilizing stepwise multiple regression analysis. Stepwise regressions were also run on the other 16 criterions. In view of the possibility that other factors might intercede as explanatory variables, 'marital status' and 'age of respondent' were also included in the regression model as independent variables. The regressions on criterions relating to respondents' spouse and/or children did not include marital status as an indicator. The latter was operationalized as a dummy variable where:

V7 (1,3 = 1)(2 = 2) therefore D7 = 0 if V7 = 1, D7 = 1

Occupation was also operationalized as a dummy variable where:

V2 (1,2,4 = 1)(3 = 2)(5,6 = 3) therefore D2, 1 = 0 if V2 = 1, d2,1= 1 and D2,2 = 0 if V2 = 2, D2,2 = 1

The expected relationship between criterion and indicators takes the form:

V52 = f(length of residence, occupation, age, marital status)

Table 7.18

Post Decision Satisfaction.
 Crosstabulation of Occupation and 17 Criterion Variables.
 Summary Statistics and Levels of Significance.
 Total Sample

Criterion #	Description	X ²	Sig	Eta ²
51	Part of Community	6.110	.634	.012
52	Satisfaction with move	6.938	.543	.015
53	Spouse's Satisfaction with move	5.321	.722	.000
54	Accepted by co-workers	14.444	.050*	.007
55	Spouse accepted by neighbors	5.760	.674	.015
56	Childrens acceptance by move	7.605	.473	.012
59	Satisfaction with work environment	14.880	.050*	.049
60	Satisfaction with wages	12.020	.150	.025
61	Satisfaction with job variety	16.452	.036*	.063
62	Satisfaction with job safety	10.328	.242	.025
63	Employer's attitude toward job safety	19.016	.014*	.071
64	Employer's concern for work enviornment	11.706	.164	.049
65	Satisfaction with community lift	12.999	.111	.038
66	Satisfaction with recreation facilities	11.509	.174	.004
67	Satisfaction with Retail facilities	5.333	.721	.001
68	Satisfaction with Service facilities	7.589	.474	.011
69	Satisfaction with Accommodations	11.174	.192	.024

All Crosstabulations with 8df. *Denotes Statistically Significant at .05.

Once again this hypothesis was not supported by analysis. Table 7.23 shows that in terms of Variable 52 'age of respondent' accounted for the largest proportion of explained variation (50 percent). An additional 32 percent was accounted for by occupation, while the residue was comprised of marital status. Occupation was represented by the unskilled/semi-skilled and the relationship was negative; marital status was represented by the unmarried and again the relationship was negative. All three indicators were significant at better than .05, although given the degrees of freedom this was hardly surprising. The relationship between criterion and indicators can be expressed thus:

$$V52 = a + b (\text{age}) + b (D2,1) + b (D7) + E (\text{Error})$$

The b coefficients in the regression model show that for every unit increase in age there was a corresponding increase in levels of satisfaction of .151, which is very slight.

Table 7.19
 Post Decision Satisfaction.
 Crosstabulation of Occupation and Variable 54
 (Accepted by Co-workers).
 Total Sample

Occupational Group	N	Level of Satisfaction				
		Low 1	2	3	4	5 High
Unskilled/ semi/skilled	112	8.4%	9.5%	12.8%	31.9%	37.4%
Skilled blue-collar	83	4.3%	4.3%	23.2%	29.0%	39.1%
Skilled/prof. white collar	55	2.2%	—	13.0%	52.2%	32.6%
Column %	250	6.3%	7.3%	16.3%	35.4%	35.8%

$\chi^2 = 14.444$ 8 df. Sig = .050 Eta² = .007

Dummy variable relationships are rather more difficult to explain in linear terms, since excluded categories become the datum for assessing the dummies. Thus the b coefficient for D2,1 is the difference in predicted Y for cases that are classed as unskilled/semi-skilled as compared to cases classed as Other (O). In this instance the b coefficient for D2,1 was -.274, while for D7 (marital status: unmarried) it was -.184. The latter two coefficients are consistent with other related findings, which suggest lower levels of satisfaction among the unmarried, unskilled/semi-skilled on issues related to job and community environments, even though much of the variation was not statistically significant. The 'age' factor is interesting because it was not found to be an important explanatory variable in the descriptive analyses, except in isolated instances. However, given the low b and F coefficients it may be argued that it was not an overly important variable here either.

Nevertheless, it can be seen in the summary of statistics for regressions run on the other 16 criterions (Table 7.24) that age of respondent accounted for the bulk of

Table 7.20
 Post Decision Satisfaction.
 Crosstabulation of Occupation and Variable 59
 (Satisfaction with the Work Environment).
 Total Sample

Occupational Group	N	Level of Satisfaction				
		Low 1	2	3	4	5 High
Unskilled/ semi/skilled	112	11.7%	16.0%	22.3%	29.8%	20.2%
Skilled blue-collar	83	10.1%	4.3%	20.3%	37.7%	27.5%
Skilled/prof. white collar	55	4.3%	4.3	13.0%	43.5%	34.8%
Column %	250	9.6%	9.6%	19.6%	35.4%	25.8%

$\chi^2 = 14.880$ 8 df. Sig = .050 Eta² = .049

explained variation in six of the 17 criterions; all were positive and all except one were in criterions related to the decision to move and satisfaction with the community. Length of residence was the primary explanatory variable in only two instances: Satisfaction with community life (Variable 65) and satisfaction with job safety (Variable 62). The criterion related to childrens' satisfaction with the move (Variable 56) was primarily explained by occupation, represented by the skilled blue-collar workers; the relationship was negative. Of the criterions related to community satisfaction three were primarily explained by age (all positive), one by length of residence (positive), one by occupation (skilled blue-collar: negative), one by marital status (unmarried: negative) and one by marital status (unmarried: positive). Criterions related to the work environment were overwhelmingly explained by occupation, represented by the unskilled/semi-skilled; in all cases the relationship was negative. Age and length of residence accounted for most of the explained variation in the other two criterions belonging to this group.

Table 7.21
 Post Decision Satisfaction.
 Crosstabulation of Occupation and Variable 61
 (Satisfaction with Job Variety).
 Total Sample

Occupational Group	N	Level of Satisfaction				
		Low 1	2	3	4	5 High
Unskilled/ semi/skilled	112	8.6%	15.1%	21.5%	28.0%	26.9%
Skilled blue-collar	83	4.3%	4.3%	24.6%	27.5%	39.1%
Skilled/prof. white collar	55	2.2%	4.3%	13.0%	28.3%	52.2%
Column %	250	5.8%	9.1%	20.7%	27.9%	36.5%

$\chi^2 = 16.452$ 8 df. Sig = .036 Eta² = .063

Overall, occupation remained the single most important explanatory variable, since it accounted for most of the explained variation in seven of the 17 criterions. However, its importance is more correctly confined to the workplace; age factors become more relevant to the move itself and to the community environment. Although length of residence appeared as the primary explanatory variable in only two instances, it ranked second in six of the 17 criterions and in all cases the relationship was positive. This suggests that length of residence does specify attitudes, albeit only to a slight degree.

Utilization of Mass Media and Post Decision Satisfaction

It has been argued that mass media would possess at best a comparative function as a reference other, thus exercising little normative control over migrants. According to the literature this normative control mechanism is a primary cause of poor morale (and low success in job-finding) among migrants who utilize a migrant stock in their information search behavior. Consequently it was hypothesized that those utilizing mass media would, ceteris paribus, express higher levels of post decision satisfaction than those who utilized

Table 7.22
 Post Decision Satisfaction.
 Crosstabulation of Occupation and Variable 63
 (Employer's Attitude toward Job Safety)
 Total Sample

Occupational Group	N	Level of Satisfaction				
		Low 1	2	3	4	5 High
Unskilled/ semi/skilled	112	11.8%	9.7%	17.2%	31.2%	30.1%
Skilled blue-collar	83	7.2%	15.9%	14.5%	23.2%	39.1%
Skilled/prof. white collar	55	-	2.2%	8.9%	31.1%	57.8%
Column %	250	6.3%	7.3%	16.3%	35.4%	35.8%

$\chi^2 = 14.444$ 8 df. Sig = .050 Eta² = .007

migrant stocks.

This hypothesis was tested by again using Variable 52 (Satisfaction with the personal decision to move). The indicator variable 'Primary Information Source' was operationalized by developing two categories from Variable 57 in the survey instrument, which asked respondents to identify information sources utilized most in the search for job opportunities at destination. The first category was 'Mass Media' (newspapers, radio, and television); the second was 'Migrant Stock' (friends and relatives at destination). All other alternatives were excluded from the analysis.

Table 7.25 supports the hypothesis. Those who utilized mass media in their information search do show higher levels of satisfaction with their decision to move than those who utilized migrant stocks. The relationship was significant at better than the .05 level.

This criterion (Variable 57) was also subjected to stepwise multiple regression in order to test the hypothesis that length of residence would specify the bivariate

Table 7.23

Post Decision Satisfaction.
 Stepwise Regression of Variable 52
 (Satisfaction with the Decision to Move)
 on all Considered Indicators.
 Total Sample

Step	Constant	V6	D2,1	D7	V26	R	r ²	F	df.
1	3.091	B .214				.139	.019	4.026*	1:204
		SE .010							
		F 4.027							
2	3.245	B .204	-.273			.179	.032	3.382*	2:203
		SE .010	.166						
		F 3.687	2.705						
3	3.432	B .162	-.272	-.196		.193	0.37	2.632	3:202
		SE .011	.166	.185					
		F 2.042	2.681	1.127					
4	3.428	B .151	-.274	-.184	.987	.196	.038	2.024	4:201
		SE .011	.166	.187	.002				
		F 1.700	2.703	.973	.231				

*Denotes statistically significant at, or better than .05

V6 = Age of respondent

D2,1 = Occupation – unskilled/semi skilled

D7 = Marital status – unmarried

V26 – Length of residence

relationship. 'Primary Information Source' was incorporated into the regression model as a dummy variable where:

V57 (1,2,1 = 1)(6 = 1)(Else = 9) therefore D57,1 = 0 if V57 = 1, D57,1 = 1 and
 D57,2 = 0 if V57 = 2, D57,2 = 1

Table 7.24

Post Decision Satisfaction
Primary Explanatory Variable of all Considered Predictors
Resulting from Multiple Regression Analysis on each Criterion.
Total Sample.

Criterion	Primary Predictor	% Explained Variation	Sig.
51 (Part of Community)	Age of Respondent	57%	.009*
52 (Satisfaction with move)	Age of Respondent	49%	.046**
53 (Spouse's satisfaction with move)	Age of Respondent	67%	
54 (Accepted by Co-workers)	Age of Respondent	34%	.121
55 (Spouse accepted by neighbours)	Occupation (skilled blue-collar)	43%	.144
56 (Children's acceptance of move)	Occupation (skilled blue-collar)	74%	.113
59 (Satisfaction with work environment)	Occupation (unskilled semi-skilled)	58%	.015*
60 (Satisfaction with wages)	Occupation (unskilled semi-skilled)	20%	.004*
61 (Satisfaction with job variety)	Occupation (unskilled semi-skilled)	20%	.220
62 (Satisfaction with job safety)	Length of residence	61%	.017*
63 (Employer's attitude toward job safety)	Occupation (unskilled/semi skilled)	45%	.017*
64 (Employee's concern for work environment)	Occupation (unskilled/semi skilled)	23%	.024*
65 (Satisfaction with community life)	Length of residence	22%	.057*
66 (Satisfaction with recreation facilities)	Age of respondent	40%	.003*
67 (Satisfaction with retail facilities)	Age of respondent	76%	.042*
68 (Satisfaction with service facilities)	Marital Status	50%	.005*
69 (Satisfaction with accommodations)	Marital Status	26%	.160
		25%	.128

*Denotes statistically significant at, or better than, .05

Table 7.25

Satisfaction with the Decision to move.
 Crosstabulation of Variable 57
 (Most Useful Job Information) and Variable 52
 (Satisfaction with the Decision to Move).
 Total Sample.

Information Source	N	Level of Satisfaction				
		1 low	2	3	4	5 High
Mass Media	76	3.1%	9.4%	18.8%	25.0%	43.8%
Migrant Stock	74	9.7%	8.1%	27.4%	35.5%	19.4%
Column %	150	6.3%	8.7%	23.0%	30.2%	31.7%

$$\chi^2 = 10.271 \text{ Sig.} = .036 \text{ Eta}^2 = .044$$

Again, occupation, marital status, and age of respondent were also included in the regression model as alternative indicators. As before, occupation and marital status were operationalized as dummy variables. It can be seen from Table 7.26 that the hypothesis was not supported. Although all indicators were statistically significant, 'Primary Information Source' accounted for approximately 40 percent of the explained variation. This indicator was represented by D57,1 which is mass media, and the relationship is positive. Age of respondent and occupation (unskilled/semi-skilled: negative) accounted for a further 24 and 16 percent of the variation respectively. Thus the relationship between criterion and indicators can be expressed as:

$$V52 = a + b(D57,1) + b(\text{age}) + b(D2,1) + E (\text{Error})$$

The b coefficients for D57,1, age, and D2,1 were .294, .179, and -.249 respectively. All three indicators were statistically significant at better than .05. These findings indicate that while 'information source' does specify post-decision satisfaction among those utilizing mass media as a surrogate for migrant stocks, age factors still persist at a broader level. It must also be remembered that this test excluded those who utilized employment networks, i.e., mostly the better skilled, who also used mass media

Table 7.26

Post Decision Satisfaction. Stepwise Regression of Variable 52
 (Satisfaction with the decision to move) on all considered Variables.
 Total Sample

Step	Constant		D57,1	V6	D2,1	D7	R	R ²	F	df.
1	3.602	B	.366				.140	.019	4.123*	1:204
		SE	.180							
		F	4.123							
2	3.075	B	.319	.186			.184	.034	3.583*	2:203
		SE	.181	.010						
		F	3.099	3.003						
3	3.214	B	.294	.179	-.249		.211	.044	3.153*	3:202
		SE	.181	.010	.166					
		F	2.639	2.801	2.248					
4	3.399	B	.291	.138	-.248	-.190	.223	.049	2.633*	4:201
		SE	.181	.011	.166	.184				
		F	2.574	1.479	2.231	1.070				

*Denotes Statistically Significant at, or better than, .05

D57,1 = Primary information source – mass media

V6 = Age of respondent

D2,1 = Occupation – unskilled/semi skilled

D7 = Marital status – unmarried

extensively. The stability of D2,1 is interesting, since it is consistent with previous findings associated with the adoption of mass media as a surrogate for migrant stock. It will be recalled that those who utilized mass media as a reference other tended to be better skilled than those adopting migrant stocks.

Cross Referencing Data

For the purpose of cross-referencing post-decision satisfaction respondents were asked to compare the general situation in the community with information they had gathered prior to arrival (Variable 95 in the survey instrument). Crosstabulation with occupation and 'Primary Information Source' introduced as a control variable revealed that the latter produced some specification. It can be seen in Tables 7.27 and 7.28 that those who utilized mass media were much less likely than those utilizing a migrant stock to find

Table 7.27

Post Decision Satisfaction:
Crosstabulation of Occupation and Variable 95
by Primary Information Source A: Mass Media
Total Sample

		Assessment					
Occupational		N	Much Better	Better	Same	Worse	Much Worse
Unskilled/ semi skilled	28		4.2%	20.8%	33.3%	41.7%	-
Skilled blue collar	30		-	20.0%	64.0%	12.0%	4.0%
Skilled/prof. white collar	26		-	14.3%	78.6%	7.1%	-
Column %	84		1.6%	19.0%	55.6%	22.2%	1.6%

$$X^2 = 13.844 \quad 8 \text{ df.} \quad \text{Sig} = .085 \quad \text{Lambda} = .071$$

the situation 'the same' as their information had indicated. This is particularly noticeable among the unskilled/semi-skilled. Thus, while a fair proportion of the group which had utilized mass media considered the situation better than prior information had indicated, an even larger proportion considered the situation worse. This pattern was similar among the unskilled/semi-skilled who had utilized a migrant stock, suggesting that information source has little effect on this group. The findings are consistent with the immediately previous data. Overall, it can be seen that the better skilled who used mass media were more likely to find the situation better than those who had utilized a migrant stock, although these migrants tended to find the situation better regardless of information source. Controlling for marital status showed that, generally, far fewer married than unmarried respondents considered the situation 'the same' as information previously gathered. However, marital status produced little change in the positive-negative distribution. The suggestion here is that "imperfect information" may be more attributable to mass media as an information

Table 7.28

Post Decision Satisfaction:
 Crosstabulation of Occupation and Variable 95
 Primary Information Source B: Migrant Stock
 Total Sample.

		Assessment					
Occupational		N	Much Better	Better	Same	Worse	Much Worse
Unskilled/ semi skilled	44		2.6%	13.2%	55.3%	28.9%	-
Skilled blue collar	20		5.6%	11.1	66.7%	11.1%	5.6%
Skilled/prof. white-collar	6		-	20.0%	80.0%	-	-
Column %	70		3.3%	13.1%	60.7%	21.3%	1.6%

$\chi^2 = 6.703$ 8 df. Sig = .568 Lambda = 0.0.

source than to migrant stocks, but at the same time is interpreted by occupational skill levels.

Employment Networks as a Reference Other

For inferential purposes data relating to the significance of employment networks as a reference other were taken from the total sample, using as usual the 2-occupational group arrangement. It was hypothesized that skilled and professional white-collar migrants would be more likely to adopt employment networks (as previously defined) in the information search process than their blue-collar counterparts.

Discriminant analysis provided strong support for this hypothesis. The employment network typology succeeded in discriminating between the two occupational groups at better than the .001 level of significance (Table 7.29). Canonical discriminant functions evaluated at group centroids were -.21 (indicating a weak negative relationship) for occupational Group 1 (the blue-collar workers) and .77 for Group 2 (indicating a moderate

Table 7.29

Discriminant Analysis:
Employment Networks.
Total Sample

Function	Eigenvalue	% variance	Canonical Correlation	After function	Wilks' Lambda	χ^2	DF	Sig.
1	.170	100	.381	0	.854	31.632	12	.0016
<hr/>								
N = 251								
<hr/>								

positive relationship). Table 7.30 gives the pooled within-groups correlations for the 12 criterion variables used in this test. While one of the comparative function traits shows a very high value (.928) it should be pointed out that this trait identifies company transfers and therefore would be expected to produce significant separation. Excluding the 'function' dimension, then, 'role' appears to provide most of the separation, followed by 'credibility.' Approximately one third of the criterion variables failed to produce any meaningful separation in this test.

The rather weak relationship on the part of Group 1 can be largely explained by examining the 3-occupational group arrangement. Table 7.31 shows that much of the negative effect lies within the unskilled/semi-skilled group. Some of the skilled blue-collar migrants clearly utilized employment networks as a salient reference other in the information search process. Canonical discriminant functions in the 3-group split increased to -.44 for Group 1 (the unskilled/semi-skilled), remained more or less stable at .79 for Group 3 (the skilled/professional white-collar migrants), and declined to .07 for Group 2 (the skilled blue-collar migrants). Discriminant analysis was able to 'correctly' classify 68 percent of the grouped cases on the basis of this reference other typology, using the 2-group split (Table 7.32). The proportion declined to 53 percent when three occupational groups were introduced.

Table 7.30

Pooled Within - Groups Correlations
 Between Canonical Discriminant Functions and Discriminant Variables:
 Employment Networks
 Total Sample

Criterion #	Function	Dimension	Type	Trait #
3.3.2	.928	Function	Comparative	2
3.1.2	.484	Role	Role-Specific	2
3.2.4	.230	Credibility	Job-Specific	2
3.3.1	-.203	Function	Comparative	1
3.2.3	-.185	Credibility	Job-Specific	1
3.3.1	-.129	Role	Role-Specific	1
3.3.4	-.126	Function	Normative	2
3.3.3	.110	Function	Normative	1
3.2.1	.048	Credibility	Generalized	1
3.1.4	.033	Role	Generalized	2
3.2.2	-.014	Credibility	Generalized	2
3.1.3	-.003	Role	Generalized	1

Canonical Discriminant Functions Evaluated at Group Centroids

Group 1 (blue-collar): -.28

Group 2 (white-collar): .773

The Nature of the Employment Network Relationships

Standard deviations for the summed traits of the three dimensions in this reference other typology are reproduced in Table 7.33. As in the other typologies the data for this part of the analysis are taken from the 3-occupational group arrangement. For both the skilled/professional white-collar and skilled blue-collar groups employment networks appear to be role-specific, but enjoying a more generalized credibility. This suggests that while these occupational groups look to employment networks largely during job search, their influence extends somewhat beyond this sphere. Some support for this interpretation can be found in the normative function indicated by the summed SDs. Thus, the general picture generated for employment networks is one of specificity in the job search but

Table 7.31

Discriminant Analysis. Classification Results
 Employment Networks. Total Sample.
 3–Occupational Group Split

Actual Group	# of Cases	Predicted Group Membership		
		Group 1	Group 2	Group 3
1(unskilled/ semi skilled)	112	67.0%	22.3%	10.6%
2(Skilled blue collar)	83	36.2%	40.6%	23.2%
2(Skilled/prof. white-collar)	55	15.2%	69.6%	15.2%

Summary Statistics: 53.11% of grouped cases correctly classified

Table 7.32

Discriminant Analysis. Classification Results
 Employment Networks. Total Sample.
 2– Occupational Group Split

Actual Group	# of Cases	Predicted Group Membership	
		Group 1	Group 2
1(blue collar)	112	65.0%	35.0%
2(white-collar)	55	19.6%	80.4%

Summary Statistics: 68.4% of grouped cases correctly classified

Table 7.33

Nature of the Employment Network Relationship.
Total Sample (Derived from Group Standard Deviations)

Dimension / Type	Occupational Group		
	Group 1	Group 2	Group 3
Role: Role-Specific (3.1.1)	1.390	.621	.569
Role: Role-Specific (3.1.2)	<u>.891</u>	<u>.925</u>	<u>.979</u>
Summed SD:	<u>2.281</u>	<u>1.546*</u>	<u>1.148*</u>
Role: Generalized (3.1.3)	.796	.878	.809
Role: Generalized (3.1.4)	<u>1.272</u>	<u>.878</u>	<u>.809</u>
Summed SD:	<u>2.068*</u>	<u>1.815</u>	<u>1.756</u>
Credibility: Job-Specific (3.2.1)	1.275	.833	1.456
Credibility: Job-Specific (3.2.2)	<u>1.266</u>	<u>.947</u>	<u>1.514</u>
	<u>2.541</u>	<u>1.780</u>	<u>2.970</u>
Credibility: Generalized (3.2.3)	1.241	.884	.924
Credibility: Generalized (3.2.4)	<u>.741</u>	<u>.813</u>	<u>.770</u>
	<u>1.982*</u>	<u>1.697*</u>	<u>1.694*</u>
Function: Comparative (3.3.1.)	.952	.923	1.471
Function: Comparative (3.3.2.)	<u>.862</u>	<u>.961</u>	<u>.751</u>
	<u>1.814*</u>	<u>1.884</u>	<u>2.222</u>
Function: Normative (3.3.3.)	.939	.902	.964
Function: Normative (3.3.4.)	<u>.901</u>	<u>.850</u>	<u>.862</u>
	<u>1.840</u>	<u>1.752*</u>	<u>1.826*</u>

*Denotes lowest summed coefficients in each dimension

exercising broader influence in career patterns. These findings are perhaps not surprising, since skilled and professional workers commonly belong to associations which possess regulatory powers. The acknowledgement of these powers by employers combine to exercise considerable normative influence over workers. Indeed, this normative influence is indicated in Table 7.33.

The Cross Referencing Data

Several variables were incorporated into the survey instrument for the purpose of assessing criterion validity among the reference other typologies. One variable asked respondents to declare which sources of information were utilized most when gathering facts about job opportunities at destination (Variable 57). Table 7.34 gives the distribution of responses on this variable, based on the 3-occupational group arrangement. The categories have been re-grouped for easier display. Distributions reflect the MIRO test responses to a high degree, although it should be remembered that the MIRO test battery did not aim solely at identifying job search patterns. The salience of a migrant stock is evident in both blue-collar groups (Groups 1 and 2); however, it increases noticeably among the less skilled. This was clearly identified in the discriminant analyses. The broad appeal of mass media is also confirmed in this table. All groups utilized them to some extent although the table, being comprised of total-sample data, does not identify the specification created by controlling for community. Employment networks are seen to be very much the domain of skilled/professional white-collar migrants, although 27 percent of the skilled blue-collar group also identified with these sources.

Another question (Variable 50) asked respondents which information sources had provided the *most useful* information when gathering facts about job opportunities at destination. The purpose behind this and Variable 57 was to find out whether sources most utilized actually provided the most useful information. Obviously this would be a retrospective assessment but not, it was considered, beyond the ability of most respondents. Table 7.35 gives the distributions on this variable, using occupation as predictor. The results are interesting because they show that while migrant stocks were heavily favored by the less skilled (in Variable 57), they were less useful in providing critical information about jobs at destination. This interpretation is based on the fact that proportionately fewer of these (and to a slightly lesser extent the skilled blue-collar migrants) respondents selected a migrant stock in Variable 50 than in Variable 57.

Post-Decision Satisfaction Among the Skilled/Professional White-Collar Migrants

It has already been shown that there was no statistically significant relationship between occupation levels and levels of satisfaction with the decision to move (Variable 52). Moreover, it was shown that length of residence in the community did not, as

Table 7.34

Migrants' Identification of Most Utilized Information Sources.
 Crosstabulation of Occupation and Variable 57
 Total Sample

Occupational Group	#	Information Source		
		Mass Media	Migrant Stock	Employment Networks
Unskilled/ semi skilled	108	26.7%	48.9%	24.4%
Skilled blue-collar	51	35.8%	32.4%	30.9%
Skilled/prof. white-collar	81	32.6%	14.0%	53.5%
Column %	240	31.3%	35.8%	32.8%

$\chi^2 = 19.139$ Sig = .000 Contingency Coefficient = .294

hypothesized, override variations based on occupational skill levels. Rather, older respondents, particularly among the more highly skilled, showed slightly higher levels of satisfaction than their younger counterparts. As previously noted, marital status provided a small amount of interpretation although it was not statistically significant. Generally, older skilled/professional white-collar migrants tended to be more positive about their decision to move and in other matters concerning morale, even though, on average, they remained in the community for shorter periods than the other occupational groups.

Jobs Prior to Moving: The Skilled/Professional White-Collar Migrants

It was also hypothesized that skilled/professional white-collar migrants to SRICs would be more likely than the blue-collar groups to have been hired prior to moving. Again this hypothesis was supported by the data. Crosstabulation of occupation and Variable 21 showed a statistically significant relationship at better than .001. Nearly 94 percent of the skilled/professional white-collar group stated they had a job lined up prior to arrival in their respective communities. This compares with 82.6 percent for the skilled blue-collar

Table 7.35

Migrants' Identification of the most Useful Information Sources
 Crosstabulation of Occupation and Variable 50.
 Total Sample

Occupational Group	#	Information Source			Employment Networks
		Mass Media	Migrant Stock		
Unskilled/ Semi skilled	112	40.9%	41.9%		17.2%
Skilled blue-collar	54	49.3%	23.2%		27.5%
Skilled/prof. white-collar	84	37.8%	1.0%		51.1%
Column %	250	43.0%	29.0%		28.0%

$\chi^2 = 24.609$ Sig = .000 Contingency Coefficient = .325

migrants and 46.8 percent for the unskilled/semi skilled (it was noted in the previous section that the proportion for the unskilled was only 21.8 percent).

These findings, however, are qualified by two important factors. Firstly, just over 15 percent had been transferred by their respective employers. While transferrals were not exclusively enjoyed by the skilled professional white-collar employees, they certainly were more common. Secondly, age of respondent once again produced some specification. Examination of Table 7.36 reveals a steadily declining relationship between occupation and prior hiring as age of the respondent increases. Only 40 percent of the unskilled/semi-skilled under 22 years of age had jobs already lined up. But by age 43 and over this figure had climbed to 75 percent. Apart from the anomaly in the 38 - 42 year age bracket, the rate for the skilled/professional white-collar group remains fairly consistent. It is even more consistent for the skilled blue-collar migrants. These findings, like many others where age intervenes, undoubtedly reflect the life cycle. Older workers are more likely to be married and more burdened with family responsibilities than the

Table 7.36

Jobs Prior to moving: Crosstabulation of Occupation and Variable 21,
Controlling for Age of Respondent. Total Sample

		Under 22 yrs		23 - 27 yrs		28 - 32 yrs		33 - 37 yrs		38 - 42 yrs		over 42 yrs	
Occupational Group	Yes	No	Yes	No	Yes	No	Yes	No	Yes	No	Yes	No	Yes
Group 1	40.0%	60.0%	30.3%	69.7%	64.7%	35.3%	44.4%	55.6%	71.4%	28.6%	75.0%	25.0%	
Group 2	80.0%	20.0%	78.3%	21.7%	85.7%	14.3%	88.9%	11.1%	80.0%	20.0%	87.5%	12.5%	
Group 3	85.7%	14.3%	94.4%	5.6%	100.0%	0.0%	100.0%	0.0%	66.7%	33.3%	100.0%	0.0%	
Column Totals:	59.5%	40.5%	60.8%	39.2%	81.4%	18.6%	71.4%	28.6%	73.3%	26.7%	84.2%	15.8%	
N=252													
	X ² =6.893		X ² =24.371		X ² =6.042		X ² =5.755		X ² =1.94		X ² =1.138		
	Sig.=.031		Sig.= .000		Sig.= .048		Sig.= .053		Sig.= .907		Sig.= .566		
	Lambda = .266		Lambda = .448		Lambda = .000		Lambda = .166		Lambda = .000		Lambda = .000		

younger, single migrants. It follows that there would be a greater reluctance to take chances under these circumstances, and conversely a greater incentive to make the best of a situation. Marital status, it will be recalled, interpreted occupation to some extent, with a slightly higher proportion of the married respondents, particularly in the skilled blue-collar group (which also had the highest proportion of children), claiming they had a job prior to moving.

Summary

The MIRO test battery was shown to successfully discriminate between occupational groups on the basis of three pre-developed reference other typologies. However, the criterion variables used in the typologies did not prove to be quite so powerful as pre-testing indicated. Generally, blue-collar migrants were more likely to utilize a migrant stock than the skilled/professional white-collar migrants. Conversely, the latter group were much more likely to utilize employment networks in their information search behavior than the blue-collar migrants. While a few statistically significant differences were found among the blue-collar groups, the skilled workers did tend to identify more with the skilled/professional white-collar group on several issues. Similarly, the semi-skilled white-collar group consistently aligned itself with the semi-skilled blue-collar group.

The test battery also supported the hypothesis that migrants to newer SRICs would tend to utilize mass media as a surrogate for migrant stock. Other data confirmed a smaller proportion of migrants, within their respective occupational groups, using migrant stocks in the newer communities. However, mass media proved to be more widely used, both within and among the occupational groups, in the information search process than had been anticipated. Skilled/professional white-collar migrants provided much of the discrimination in testing for the adoption of mass media as a reference other. Cross referencing data supported the test battery results.

Data yielded by the test battery also indicated the nature of the reference other relationship. Most of these relationships were consistent with the literature and arguments presented in earlier chapters. Migrant stocks seem to have a non-specific role and a generalized credibility for the less skilled, suggesting that they serve to reduce psychic cost rather than providing specific job information. For the better skilled migrant stocks

appear to be more role-specific, with a more narrowly defined range of credibility. This trend is particularly noticeable among the skilled blue-collar migrants. Contrary to expectations this reference other showed no indication of any normative influence.

Mass media also demonstrated a generalized role for the less skilled, but was more role and job-specific for the skilled blue-collar and skilled/professional white-collar groups. These findings are compatible with migration research which, it will be recalled, shows the less skilled migrants to be less job-specific in their information search and less likely to have obtained a job prior to moving. Rather, they seem to be motivated more by 'ambiences' generated by an economic region. Of course, this should not obscure the fact that they are less likely to be hired prior to moving because of their limited skills.

In the newer communities, where mass media were utilized to a greater extent, the influence of this reference other changed somewhat for the skilled/professional white-collar workers, becoming more general in terms of role and credibility and exercising a normative function. The unusually high standard deviations among these criterion variables suggested a lower internal reliability. In turn this suggests that the role of mass media was not consistent between the two combined sample communities. For the skilled/professional white-collar migrants employment networks appeared to be role-specific and enjoying a generalized credibility, as expected. Moreover, the pervasive influence of professional and trade organizations was clearly reflected in the coefficients relating to function.

Few statistically significant relationships were found between occupational skill levels and the predictors of post decision satisfaction. Nevertheless it was found, as hypothesized, that those among the less skilled who utilized migrant stocks in their information search, were less likely to be satisfied with their move than those who utilized mass media. Generally, the better skilled were more positive about their decision to move and about the work environment. Of those who utilized mass media in their information search, the better skilled were more likely to adopt print forms. While all occupational groups favored this medium, a small proportion of the less skilled also opted for radio and television.

Age of respondent and occupational skill levels explained most of the variation among the post decision satisfaction criterions. The former variable proved to be closely

involved with the decision to move and levels of satisfaction with the community; the latter accounted for much of the variation among criterions relating to the workplace. The hypothesis that length of residence in the community would specify occupational differences was also not supported. However, it is important to note that age did not specify all occupational differences. Indeed, there was a much more consistent level of dissatisfaction among the less skilled, regardless of age, particularly among those who were unmarried. Age and marital factors were also apparent in the relationship between prior hiring and occupational skill levels. While the less skilled were equally less likely to have had a job lined up prior to moving, the proportion of those who did increased noticeably with age and among the married. Skilled and professional white-collar migrants were fairly consistent across all age categories; the skilled blue-collar group followed a similar but less pronounced pattern.

Generally, the data suggest that occupational skill levels and information search behavior possess some predictive utility in understanding manpower dynamics among Alberta's single resource industry communities. Information search behavior does appear to vary systematically among occupational groups and it is clear that mass media play an important role in this process. For the less skilled, information sources seem to function largely in a relative sense, with prospective migrants comparing their existing situation to that indicated by the information source. The more highly skilled are much more job-specific in their information search behavior, using their information sources to obtain jobs prior to moving. Moreover, their information appears to be more accurate than that gathered by the less skilled. A migrant's assessment of the situation after making the decision to move seems to be a function of age, marital status, his occupational skill levels and of the information source utilized.

VIII. CONCLUSIONS AND IMPLICATIONS FOR POLICY

This study was largely an attempt to demonstrate that role and reference group theory are fruitful perspectives from which to understand information search and the decision to migrate. Data generated by the study confirm, at least within the constraints imposed by the sampling methodology, that information search behavior does vary, both on the basis of occupational skill levels, which proxy for education and training, and the community's temporal stage of development. While the MIRO test battery was not a highly sophisticated instrument it demonstrated a fair degree of reliability when cross referenced with other data gathered in the course of the study. Thus it may be argued that it did the job it was designed to do. Although a non-recursive model in the Haller-Woelfel tradition, it proved to be highly compatible with the self-administered survey instrument. Construction and administration of the instrument were far less expensive than for a multi stage recursive model.

Information Search and the Reference Other. As anticipated, the test battery's criterion variables yielded some indication of the individual-other relationships operating among the reference other typologies. While these may be criticized for being too obtuse the data provide considerable support for them from the perspective of information search. Unfortunately, the criterion batteries were less powerful than pre-testing suggested and the instrument discriminated on the basis of only two occupational groupings. This would appear to be a semantics problem; future use of the test battery would undoubtedly capitalize on experience gained from the first generation model.

As expected, migrant stocks indicated a generalized role and credibility for the less skilled, which in turn suggests that they were being utilized for much broader purposes than simply job search. As occupational skill levels increase the job-specific function of migrant stocks increases concomitantly. Contrary to expectations, migrant stocks did not indicate a significant normative function. Similar relationships were found in the mass media typology, although they varied between the two sets of sample communities (old and new) in terms of the skilled/professional white-collar migrants. Lower criterion consensus in the newer communities, particularly with respect to 'role', suggests that the more isolated, newer communities do not receive the same media attention as those closer to large population centers. As noted in Chapter Six, it may be that while population

'newness' can indeed specify the development of a migrant stock, the effectiveness of mass media may at the same time be compromised. It may also indicate social-psychological linkages with urban centers that have not been addressed in this study. Reference other relationships obtaining for employment networks showed a fairly specific 'role' function but rather generalized 'credibility' for the skilled blue and skilled/professional white-collar migrants. These traits, combined with an indicated 'normative' function suggest that the influence of employment networks extends beyond the job sphere.

The study confirmed that, as the literature suggests, less skilled migrants were more likely to utilize migrant stocks in their information search behavior than the more highly skilled. Moreover, the data showed their information to be less accurate than that gathered by the more highly skilled. In terms of the total sample, mass media were not found to discriminate among the occupational groups. But, as hypothesized some discrimination emerged when 'community' (old and new) was entered as a control variable. Migrants to newer communities were more likely to utilize mass media than those to older communities. Nevertheless, mass media were more widely utilized among the occupational groups than had been anticipated, although the unskilled/semi-skilled used them least. Discriminant analysis also supported the hypothesis that employment networks would be largely utilized by the skilled/professional white-collar migrants. But a small proportion of the skilled blue-collar group also utilized this typology, mostly in the form of company transfers.

The hypothesis that migrants to newer communities would be less likely to utilize a migrant stock than those to older communities was also supported. However, in retrospect a larger number of sample communities should have been used to test this proposition. With only two communities in each group (old and new) it is difficult to determine whether these data reflect a smaller presence of migrant stock or simply some idiosyncratic socio-economic characteristics among the respondents. Levels of satisfaction with the decision to move did not, as hypothesized, vary systematically with occupational skill levels, nor did length of residence in the community create any meaningful specification. Multivariate analysis revealed that, while not extensive, age differences accounted for much of the small proportion of explained variation. Older migrants showed slightly higher

levels of satisfaction with the decision to move than their younger counterparts. This suggests a life cycle function within the migration process. Older migrants, especially those with dependents, are possibly more ready to rationalize their decision than those who, because of their younger age, enjoy more geographic and occupational mobility. However, it must be remembered that respondents sampled in this study were very young and fairly homogeneous in age composition.

The hypothesis that, *ceteris paribus*, levels of post-decision satisfaction would be higher for those utilizing mass media than for those utilizing a migrant stock was supported. But while this analytical procedure screened out those who utilized employment networks (and by so doing removed most of the better skilled), the involvement of occupational skill levels among the eligible residue cannot be ignored. However, regardless of causality, migrant stocks appear to exercise a negative effect on post-decision satisfaction. It will be recalled, for example, that there was a significant discrepancy between responses on selection of a migrant stock as a source of job-related information and migrants' assessment of its usefulness. Thus, as 'independent' variables migrant stocks may be attracting the wrong type of migrant; as 'dependent' variables they may be doing very little to aid the migrant beyond the initial encouragement to move.

Social Characteristics and Attitudinal Responses. Data deriving from this sample of migrants to four of Alberta's SRICs are not totally compatible with popular stereotypes. While these respondents were mostly young and had been in their respective communities for short periods of time, they were far from transient. Well over half were married and over 75 percent of the latter had children. Several variables were found to account for variation among the respondents, the most important being occupation, and marital status. However, it must be recognized that the identification of predictor variables was complicated by covariance. For example, skill levels and the proportion of married respondents both increased with age. No 'special breed' of SRIC worker emerged, although those belonging to the skilled blue-collar group came closest. These migrants were older, more likely to be married, had far more SRIC experience, and had moved more often than the other occupational groups. Ironically, as a group they were more likely to have children (and more of them); they had lived in their respective communities longer than the other group, and a very high proportion came from rural backgrounds.

Surprisingly, the less skilled, who are commonly identified with an SRIC workforce, proved to be the least transient, although these differences were interpreted to some extent by marital status. For many of the unskilled and semi-skilled this was their first move since entering the workforce. However, they were, as the literature suggests, comparatively young, less likely to be married, had been in their respective communities for short periods of time, and showed lower levels of satisfaction with the move, the job, and with the community. Like their skilled blue-collar counterparts, the skilled and professional white-collar migrants revealed some conflicting characteristics. They showed high levels of morale and satisfaction with the move, but scored lower than the unskilled in terms of length of residence. This undoubtedly reflects to some extent career aspirations and company policies of transferring key employees; but it may also indicate some disillusionment once the novelty of SRIC life wears off.

Nor did these respondents support the popular notion of speculative migration. Nearly 69 percent said they had procured a job prior to arrival, although again this factor was specified by marital status and age. On the other hand, 43.5 percent had been unemployed prior to moving, which probably explains the large proportion who stated that they were moving mainly to get a job. Those who had previously been living in Alberta were much more likely than those from elsewhere to have been hired prior to the move, and less likely to have been unemployed. At the same time, however, it must be remembered that migrants from outside Alberta tended to be less skilled, a factor which in itself articulated closely with prior hiring and unemployment.

Many of these characteristics underscore the importance of defining an SRIC sampling frame in both temporal and spatial terms. While two of the four sample communities were 'newer' in terms of population take-off and although some new development was taking place in all four, all had entered a post start-up phase. Routine operational conditions obviously encourage a more stable workforce. It has already been noted that only one of the sample communities was geographically remote, which is another factor that may be called into question with respect to their 'representativeness' of SRICs. But very few SRICs in Alberta are isolated, at least by comparison with those in Canada's far north. Thus, the communities sampled in this study are probably not atypical from the standpoint of their manpower characteristics.

As discussed earlier, reasons for moving were largely associated with wages and job opportunities. This was particularly evident among the unmarried less skilled. Not surprisingly, career patterns were more noticeable among the more highly skilled. A significant proportion of the skilled blue-collar and skilled/professional white-collar migrants, regardless of marital status, stated they had moved to get a more interesting job. Females were far less career oriented than the males. Twice as many females as males were divorced or separated and a large proportion of this group had moved simply to get a decent paying job. While motives for moving among the less skilled were narrowly confined to wages and job opportunities, they broadened considerably with increased skill levels.

With the exception of the less skilled, levels of satisfaction with the workplace were fairly high, although curiously this enthusiasm did not extend to the employers. The unskilled and semi-skilled, regardless of marital status or age, were less inclined to like the job and their co-workers, although the latter characteristic was more pronounced among the less skilled who were married. But while there was overall approval of wages and the workplace, perceptions of community physical environments were generally negative. Respondents were extremely critical of service and retail facilities, with the blue-collar groups showing slightly less so than the skilled and professional white-collar groups. Perceptions of the social environment were mediated by marital status and occupational skill levels. Single respondents, particularly the less skilled, gave little indication of any sense of 'community.' For their part the better skilled migrants, while showing a more positive attitude toward social issues, expressed considerable concern over inadequate school, recreation, and entertainment facilities. The skilled/professional white-collar migrants complained about geographic isolation from major urban centers. Inferior accommodation was a major issue among all occupational groups, but especially among the unmarried less skilled. These findings confirm other research which finds quality of life to be an important area of contention among SRIC populations. However, it is equally clear that the older, married, more highly skilled migrants are more prepared to make the best of the situation than the less skilled, unmarried. Unfortunately, high morale does not necessarily translate into longer residence. It was previously noted that the skilled blue-collar migrants had on average been in their respective communities longer than the

other occupational groups. But the skilled and professional white-collar migrants, who also showed high levels of satisfaction and morale, had been in the community for a shorter average period than the unskilled/semi-skilled.

The picture generated by these data is one of stability and conservatism among the skilled blue-collar and skilled/professional white-collar migrants, high initial enthusiasm among the skilled/professional white-collar migrants, and comparatively high levels of insecurity and dissatisfaction among the unskilled/semi-skilled. The better skilled, married migrants, while critical of what the local community had to offer, nevertheless showed better morale than their unmarried counterparts.

A. Implications for Policy: Government

The data show that very few migrants were impressed with the physical infrastructure of their communities. Concomitantly, a sense of community was lacking among many of the respondents. Oddly, geographic isolation did not seem to be a major issue, except among the skilled white-collar migrants. But recreation, entertainment, school, and accommodation facilities were of concern to respondents in all four sample communities. The better skilled, married respondents with young children were worried about high rates of juvenile delinquency. Several observed that these communities were 'alright for young adults' but had little to offer children. Many indicated their intention to leave the community once their children reached junior high school age. Other parents were concerned about low educational aspirations and a corresponding quality of education. There are certainly very few organized activities for children and juveniles in the SRICs studied. Not surprisingly Grande Cache, because of its larger population, had more facilities than the other three, but this fact was not reflected in the questionnaire responses. Like city children, those in the SRICs take to hanging around the local drug store or coffee shop. And like the blue-collar environments of urban centers, lack of parental control is exacerbated by shift work.

Ironically, Alberta's SRICs have obviously been accepted (if not unreservedly) by married migrants with children, as evidenced by the high proportion represented in this sample. But it is also clear that a cost-benefit evaluation operates, with employment (and wage) opportunities offsetting the 'cost' of living in an SRIC. These migrants are not going

to commit themselves to long-term settlement unless the community becomes a more desirable place for children to be raised in. Obviously there is a limit to the amount of money that governments can, or should, expend on communities of this type. On the other hand it may be argued that SRICs are both a social and economic investment, which should at the very least be in proportion to their expected yield. This is a succinct way of saying that it is not always appropriate to predicate community funding on a per capita basis. It is difficult to ignore the impression that, despite bureaucratic rhetoric, most of these communities are regarded as a resource to be exploited, with little thought to possible mechanisms of survival once the resource has been depleted. From the standpoint of physical infrastructure, many of the problems facing SRICs are fiscal and tax related. Often their industries are not located in the community itself; as a result local financing is strained by commitments which ultimately yield a very weak tax base.

The needs of these communities may also have been underestimated by government agencies, who perhaps equate community needs with local socioeconomic compositions. But while many of the blue-collar migrants in this study had rural backgrounds and therefore might be predicted as being more 'accepting' of SRIC conditions, it is clear that such assumptions, if they exist, would be poorly founded. Certainly these migrants were slightly more tolerant of existing physical infrastructures but they were far from enthusiastic about them. Unfortunately, governments have characteristically shown an unwillingness to gamble on public investments of this type. Consequently, planning strategies, and their implementation in particular, have tended to be more reactive than proactive.

B. Implications for Policy: The Employer

The tacit blueprint of the 'ideal employee' adopted by many SRIC employers is fairly well-supported by the findings of this study. The more highly skilled married migrants showed greater stability (although with somewhat less initiative) in the workplace and higher levels of post decision satisfaction than the less skilled, unmarried migrants. Employers also appear to be correct in identifying 'housing' as a key strategy for fostering permanent settlement, although this is clearly not enough to overcome general dissatisfaction with inadequate community infrastructures. The question of whether a

migrant's age can be considered an important variable is less clear. Respondents in this study were very young, and although some statistical analyses showed older migrants to be more satisfied with community life and their decision to move, age did not emerge as a particularly strong predictor. Management spokesmen for the major employers located in the sample communities indicated a preference for 'younger' employees who were married, perhaps with young children. These preferences were reflected to a high degree in the sample. Several employers indicated they favored migrants with rural backgrounds because, as one spokesman put it, "they are better at fixing things."

From the standpoint of the job search the data reveal a strong preference among the more highly skilled for mass media. But at the same time these sources do not seem to be providing information which is as accurate as it might be. The ability to gather 'accurate' information clearly varies among occupational skill levels, obviously as a function of education, and it is also evident that marital status interprets this relationship in terms of decision-making. However, employers could do much to improve both the scope and accuracy of information in their recruitment programs. The study showed a marked preference for migrant stocks among the less skilled and at the same time lower levels of post-decision satisfaction among those who used these sources. Utilization of migrant stocks was also shown to be higher among the 'older' SRICs, suggesting that employers in these communities may have to increase their efforts to counter this type of information source. There is a possibility that mass media sources may be more guilty of 'omission' than of presenting misleading facts. Those sources over which employers exercise some control, such as media advertising and recruitment, may need to be more comprehensive regarding job information and particularly about the community itself.

Another issue concerns regionally selective in-migration. While some employers advertise widely, the data revealed by this study suggest that the better skilled, while possibly not indigenous to Alberta, nevertheless were drawn from this province. Although employers frequently cite local unavailability of certain skills there is a possibility they may be unwittingly trading quality for quantity. On the other hand they may have no choice.

C. Implications for Theory

Role theory, and reference group theory in particular, have often been criticised for their poor adaptability to empirical validation. The test battery developed for this study adds weight to Haller and Woelfel's contention that instruments can indeed be devised which identify both the nature and function of reference others. Perhaps just as importantly, this study draws attention to the need for accurate 'placement' of concepts, such as 'reference other', in the causal matrix. It would seem that persistent difficulties with this concept have been largely the result of attempt to show that it either causes, or is caused by, the behavior of individuals or the social system. As noted earlier, reference others are not directly measurable; rather, it is the behavior patterns of the actor which are actually attributed to reference other influence, and accordingly quantified. Reference others are not a purposive end in themselves but, rather, a means to an end. Thus, the actor's behavior patterns and those of the social system with which he interacts and simultaneously creates, may be operationalized into variables. The reference other, as a construct, should not.

The question may be asked: of what practical significance does the validation of role and reference group theory hold for migration behavior? Perhaps above all else it generates a useful typology of information sources, channelling them into readily identifiable objects. It also provides a vehicle for demonstrating that information search in the migration process varies systematically among socioeconomic groups. By so doing these theoretical perspectives add a vital predictive dimension to the investigation of social phenomena.

D. Future Related Research

One of the more obvious methodological limitations of this study, aside from its limited scale, was the exclusive involvement with people who had actually moved. As such it failed to adequately address the issue of 'lagged response' and those who had decided not to move at all. In its present form the study, and resulting data, tend to be conceptually one-sided. Cross-sectional data gathering also imposes constraints on the temporal nature of data gathering, while ex-post facto research of this type relies heavily upon the recalling of events which perhaps occurred several years previously. An over-time study

would permit the researcher to trace the progress of potential migrants from the decision-making stage to final outcome. Unfortunately, this methodology was not possible due to budget limitations.

In retrospect it is also likely that a geographic sampling methodology would have yielded greater variability among respondents. One noticeable characteristic to emerge from the decision to sample only the major employers and their sub contractors is a rather 'flat' set of responses, particularly in terms of demographics.

This study dealt largely with information search and the decision to move from a social psychological perspective. The data showed that knowledge about migrant's information search patterns and socioeconomic background can have considerable predictive utility in matters concerning the decision to move and levels of satisfaction with that decision. However, there is a need to know more about migrants who move to SRICs in Canada, particularly among provinces which are becoming heavily involved in the extraction of finite natural resources. The focus of attention must be on the potential adaptability of migrants to the SRIC environment. While this study does not support the popular stereotype of a 'special breed' of people who live and work in SRICs, these communities undoubtedly place demands upon their populations that are often poorly met. Such information would be of considerable benefit to elements of both the public and private sector which have the responsibility of hiring workers and developing a stable community system.

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Appendix A



DEPARTMENT OF RURAL ECONOMY

The University of Alberta

**PART I (DEMOGRAPHICS)**

COMMUNITY

CASE

01 PLEASE STATE YOUR SEX

MALE..... 1
FEMALE..... 2

06 WHAT AGE WERE YOU ON YOUR LAST BIRTHDAY?

02 WHAT IS YOUR PRESENT OCCUPATION?

03 CAN YOU BRIEFLY DESCRIBE WHAT YOUR PRESENT OCCUPATION INVOLVES?

04 HAVE YOU EVER RECEIVED ANY FORMAL TRAINING FOR THE JOB YOU ARE PRESENTLY INVOLVED IN (NOT INCLUDING ON-THE-JOB TRAINING)?

YES..... 1
NO..... 2

05 PLEASE CHECK THE HIGHEST LEVEL OF FORMAL EDUCATION YOU COMPLETED

LESS THAN GRADE 9..... 1
 GRADE 9..... 2
 GRADE 10..... 3
 GRADE 11..... 4
 GRADE 12..... 5
 SOME TECHNICAL/VOCATIONAL COLLEGE..... 6
 SOME UNIVERSITY..... 7
 TECHNICAL/VOCATIONAL COLLEGE GRADUATION..... 8
 UNIVERSITY GRADUATION..... 9
 AN ADVANCED UNIVERSITY DEGREE..... 10

07 WHAT IS YOUR PRESENT MARITAL STATUS?

SINGLE (NEVER MARRIED)..... 1
 MARRIED..... 2
 SEPARATED/DIVORCED..... 3
 WIDOWED..... 4

08 HOW MANY CHILDREN DO YOU HAVE (INCLUDING LEGALLY ADOPTED, BUT NOT INCLUDING FOSTER CHILDREN)?

09 HOW MANY OF YOUR CHILDREN ARE STILL LIVING AT HOME?

10 DOES YOUR WIFE/HUSBAND PRESENTLY LIVE WITH YOU IN THIS COMMUNITY?

YES..... 1
 NO..... 2

11 FROM THE FOLLOWING CATEGORIES, WITH WHICH RELIGIOUS DENOMINATION ARE YOU AFFILIATED?

PROTESTANT..... 1
 CATHOLIC..... 2
 NON CHRISTIAN..... 3
 NONE OF THE ABOVE..... 4
 NO AFFILIATION..... 5

12 WHAT IS/WAS YOUR FATHER'S MOST RECENT OCCUPATION?

13 WHAT TYPE OF ACCOMMODATION DO YOU PRESENTLY OCCUPY?

- SINGLE FAMILY DWELLING (A DETACHED HOUSE THAT HAS NOT BEEN SUBDIVIDED).....1
 DUPLEX.....2
 ROW HOUSE.....3
 CONDOMINIUM.....4
 APARTMENT.....5
 MOBILE HOME.....6
 CAMPSITE ACCOMMODATION.....7

14 DO YOU OWN YOUR PRESENT ACCOMMODATION?

- YES.....1
 NO.....2



15 IF NO TO THE ABOVE, HAVE YOU EVER OWNED YOUR OWN HOME?

- YES.....1
 NO.....2



16 IF YOU PRESENTLY RENT YOUR PRESENT ACCOMMODATION, IS THE RENT SUBSIDIZED BY YOUR EMPLOYER?

- YES.....1
 NO.....2
 NOT APPLICABLE.....3

17 HOW MANY PEOPLE (INCLUDING SPOUSE, CHILDREN, RELATIVES AND FRIENDS) LIVE WITH YOU AT THE PRESENT TIME?

18 WHERE WERE YOU LIVING (CITY/TOWN/PROVINCE/COUNTRY) IMMEDIATELY BEFORE MOVING TO THIS COMMUNITY?

19 WHAT WAS THE APPROXIMATE POPULATION OF THE LAST COMMUNITY YOU LIVED IN?

20 HOW MANY TIMES HAVE YOU MOVED (NOT INCLUDING MOVES WITHIN THE SAME TOWN/CITY) SINCE ENTERING THE WORK FORCE?

21 DID YOU HAVE A JOB LINED UP BEFORE ARRIVING HERE?

- YES.....1
 NO.....2

22 HAVE YOU EVER WORKED IN A SINGLE RESOURCE INDUSTRY COMMUNITY BEFORE?

- YES.....1
 NO.....2



23 IF YES TO THE ABOVE, HOW MANY TIMES?

24 WERE ANY OF YOUR FAMILY OR CLOSE RELATIVES LIVING HERE WHEN YOU ARRIVED?

- YES.....1
 NO.....2

25 WERE ANY OF YOUR FRIENDS ALREADY LIVING HERE WHEN YOU ARRIVED?

- YES.....1
 NO.....2

26 HOW MANY MONTHS HAVE YOU LIVED HERE?

27 IS THIS THE FIRST TIME YOU HAVE WORKED IN THIS COMMUNITY?

- YES.....1
 NO.....2

28 DID YOU MAKE A 'FACT-FINDING' TRIP TO THIS COMMUNITY BEFORE STARTING WORK HERE?

YES..... 1
NO..... 2

29 HOW MANY TIMES HAVE YOU RETURNED HOME (TO PARENTS, OR FORMER PLACE OF RESIDENCE) SINCE ARRIVING HERE?

30 ROUGHLY, HOW MANY TIMES A MONTH DO YOU LEAVE THIS COMMUNITY ON SHOPPING OR RECREATION TRIPS?

31 WHERE DO YOU MOST OFTEN VISIT (CITY/TOWN) ON SHOPPING OR RECREATION TRIPS?

32 WERE YOU UNEMPLOYED IMMEDIATELY PRIOR TO MOVING HERE?

YES..... 1
NO..... 2

33 HAVE YOU CHANGED EMPLOYER SINCE MOVING HERE?

YES..... 1
NO..... 2



34 IF YES TO THE ABOVE, HOW MANY TIMES?

35 WOULD YOU CONSIDER YOUR CULTURAL BACKGROUND TO BE URBAN OR RURAL?

36 WERE YOU RAISED ON A FARM?

YES..... 1
NO..... 2

37 DO YOU PRESENTLY BELONG TO A TRADE OR PROFESSIONAL ASSOCIATION (INCLUDING UNIONS)?

YES..... 1
NO..... 2

38 WHICH OF THE FOLLOWING ALTERNATIVES DO YOU RELY ON MOST FOR NATIONAL NEWS? (PLEASE CHECK ONLY ONE)

NEWSPAPERS..... 1
RADIO..... 2
TELEVISION..... 3
MAGAZINES AND/OR JOURNALS... 4
TALKING TO PEOPLE..... 5

39 WHICH OF THE FOLLOWING MEDIUMS DO YOU UTILIZE MOST DURING YOUR LEISURE TIME?

NEWSPAPERS..... 1
RADIO..... 2
TELEVISION..... 3
MAGAZINES/JOURNALS... 4
MOVIES..... 5

40 DO YOU PRESENTLY SUBSCRIBE TO, OR RECEIVE, A MAGAZINE, PERIODICAL, JOURNAL, OR NEWSLETTER PUBLISHED BY AN ASSOCIATION OR ORGANIZATION TO WHICH YOU PRESENTLY BELONG?

YES..... 1
NO..... 2

PART 2 (ATTITUDINAL)

50 PLEASE RANK, IN ORDER OF DECREASING
IMPORTANCE, WHICH OF THE FOLLOWING
ALTERNATIVES PROVIDED THE MOST USE-
FUL INFORMATION ABOUT JOB OPPORT-
UNITIES HERE

(UNIMPORTANT)

A small black starburst or asterisk symbol located in the bottom right corner of the page.

NEWSPAPERS.....	1	2	3	4	5	6	7	8	9 ¹
RADIO.....	1	2	3	4	5	6	7	8	9 ²
TELEVISION.....	1	2	3	4	5	6	7	8	9 ³
EMPLOYER.....	1	2	3	4	5	6	7	8	9 ⁴
FAMILY, FRIENDS OR RELATIVES IN <u>PREVIOUS</u> PLACE OF RESIDENCE.....	1	2	3	4	5	6	7	8	9 ⁵
FAMILY, FRIENDS OR RELATIVES ALREADY LIVING HERE.....	1	2	3	4	5	6	7	8	9 ⁶
TRADE OR PROFESSIONAL ASSOCIATIONS, INCLUDING UNIONS.....	1	2	3	4	5	6	7	8	9 ⁷
CANADA MANPOWER.....	1	2	3	4	5	6	7	8	9 ⁸

USING THE FOLLOWING SCALE OF 1 TO 5,
HOW WOULD YOU ASSESS THE FOLLOWING
ASPECTS OF YOUR MOVE HERE?

LOW **HIGH**

51 THE EXTENT TO WHICH YOU PERSONALLY
FEEL 'PART OF THE COMMUNITY'

2 3 4 5

52 THE DEGREE OF SATISFACTION WITH
YOUR PERSONAL DECISION TO MOVE
HERE

53 THE EXTENT TO WHICH YOUR WIFE/
HUSBAND IS SATISFIED WITH THE
DECISION TO MOVE HERE.....

54 THE EXTENT TO WHICH YOU FEEL
'ACCEPTED' BY CO-WORKERS....

2 3 4 5

55 THE EXTENT TO WHICH YOUR WIFE/
HUSBAND FEELS ACCEPTED BY
NEIGHBORS (IF APPLICABLE) . . .

56 THE EXTENT TO WHICH YOUR CHILDREN
HAVE ACCEPTED THE MOVE HERE (IF
APPLICABLE).

57 PLEASE RANK, IN ORDER OF DECREASING
 IMPORTANCE, WHICH OF THE FOLLOWING
 SOURCES OF INFORMATION YOU UTILIZED
MOST WHEN GATHERING FACTS ABOUT JOB
 OPPORTUNITIES HERE

(UNIMPORTANT) 

NEWSPAPERS.....	1	2	3	4	5	6	7	8	9 ¹
RADIO.....	1	2	3	4	5	6	7	8	9 ²
TELEVISION.....	1	2	3	4	5	6	7	8	9 ³
EMPLOYER.....	1	2	3	4	5	6	7	8	9 ⁴
FAMILY, FRIENDS OR RELATIVES IN <u>PREVIOUS</u> PLACE OF RESIDENCE.....	1	2	3	4	5	6	7	8	9 ⁵
FAMILY, FRIENDS OR RELATIVES ALREADY LIVING HERE.....	1	2	3	4	5	6	7	8	9 ⁶
TRADE OR PROFESSIONAL ASSOCIATIONS, INCLUDING UNIONS.....	1	2	3	4	5	6	7	8	9 ⁷
CANADA MANPOWER.....	1	2	3	4	5	6	7	8	9 ⁸

58 PLEASE RANK, IN ORDER OF DECREASING
 IMPORTANCE, WHICH INFORMATION ABOUT
 THE COMMUNITY YOU SPECIFICALLY
 SOUGHT OUT PRIOR TO MOVING HERE

(UNIMPORTANT) 

JOB OPPORTUNITIES.....	1	2	3	4	5	6	7	8	9	10 ¹
WHETHER FAMILY AND/OR RELATIVES WERE ALREADY LIVING HERE.....	1	2	3	4	5	6	7	8	9	10 ²
WHETHER CLOSE FRIENDS AND/OR FORMER WORK MATES WERE ALREADY LIVING HERE.....	1	2	3	4	5	6	7	8	9	10 ³
WAGE RATES.....	1	2	3	4	5	6	7	8	9	10 ⁴
THE CLIMATE HERE.....	1	2	3	4	5	6	7	8	9	10 ⁵
RECREATION/ENTERTAINMENT FACILITIES IN THE COMMUNITY.....	1	2	3	4	5	6	7	8	9	10 ⁶
LOCATION OF THE COMMUNITY.....	1	2	3	4	5	6	7	8	9	10 ⁷
SIZE OF THE COMMUNITY.....	1	2	3	4	5	6	7	8	9	10 ⁸
TYPE OF ACCOMMODATION AVAILABLE....	1	2	3	4	5	6	7	8	9	10 ⁹

USING THE FOLLOWING SCALE OF 1 TO 5,
HOW WOULD YOU RANK YOUR ATTITUDE
TOWARD THE FOLLOWING ISSUES?

	LOW	HIGH
59 SATISFACTION WITH THE WORK ENVIRONMENT GENERALLY.....	1 2 3 4 5	
60 SATISFACTION WITH <u>CURRENT</u> WAGES.....	1 2 3 4 5	
61 SATISFACTION WITH THE JOB FROM THE STANDPOINT OF INTEREST AND VARIETY.....	1 2 3 4 5	
62 SATISFACTION WITH JOB SAFETY.....	1 2 3 4 5	
63 SATISFACTION WITH THE CONCERN OF THE EMPLOYER TOWARD JOB SAFETY.....	1 2 3 4 5	
64 SATISFACTION WITH THE EMPLOYER'S CONCERN FOR THE WORK ENVIRONMENT GENERALLY.....	1 2 3 4 5	
65 SATISFACTION WITH COMMUNITY SOCIAL LIFE GENERALLY.....	1 2 3 4 5	
66 SATISFACTION WITH RECREATION FACILITIES PROVIDED BY THE COMMUNITY.....	1 2 3 4 5	
67 SATISFACTION WITH RETAIL FACILITIES (STORES, ETC.) PROVIDED BY THE COMMUNITY.....	1 2 3 4 5	
68 SATISFACTION WITH SERVICE/ PROFESSIONAL FACILITIES PROVIDED BY THE COMMUNITY.....	1 2 3 4 5	
69 SATISFACTION WITH ACCOMMODATION (HOUSING, ETC.).....	1 2 3 4 5	
70 IF MARRIED, HOW MUCH DID YOUR WIFE/HUSBAND INFLUENCE YOUR DECISION TO MOVE HERE?		
A GREAT DEAL.....	<input type="radio"/> 1	
SOME.....	<input type="radio"/> 2	
NOT MUCH.....	<input type="radio"/> 3	
NONE.....	<input type="radio"/> 4	
NOT APPLICABLE.....	<input type="radio"/> 5	
71 IF MARRIED, HOW MUCH DID YOU DISCUSS A POSSIBLE MOVE HERE WITH YOUR SPOUSE?		
A GREAT DEAL.....		<input type="radio"/> 1
SOME.....		<input type="radio"/> 2
NOT MUCH.....		<input type="radio"/> 4
NONE.....		<input type="radio"/> 5
NOT APPLICABLE.....		<input type="radio"/> 6

USING THE FOLLOWING SCALE OF 1 TO 5,
HOW MUCH IMPORTANCE DO YOU ATTACH TO
THE FOLLOWING DIMENSIONS OF THE WORK
ENVIRONMENT?

		LOW	HIGH	
72	HOW MUCH THE JOB PAYS.....	1	2	3
73	EQUIPMENT NECESSARY TO DO THE JOB.....	1	2	3
74	JOB SECURITY.....	1	2	3
75	SUFFICIENT INFORMATION FROM SUPERIORS TO GET THE JOB DONE.....	1	2	3
76	A JOB THAT IS VARIED AND INTERESTING.....	1	2	3
77	BEING ABLE TO SEE 'RESULTS' FROM A JOB.....	1	2	3
78	FRIENDLY CO-WORKERS.....	1	2	3
79	COMPETENT CO-WORKERS.....	1	2	3
80	COMPETENT SUPERVISORS.....	1	2	3
81	CLEARLY DEFINED JOB RESPONSIBILITIES.....	1	2	3
82	AN OPPORTUNITY TO USE INDIVIDUAL INITIATIVE.	1	2	3
83	JOB SAFETY.....	1	2	3
84	WORKING ON A JOB WITHOUT CLOSE SUPERVISION..	1	2	3
85	GENERALLY, WAS YOUR WIFE/ HUSBAND FOR OR AGAINST MOVING HERE? FOR..... AGAINST..... INDIFFERENT.....	○ ¹ ○ ² ○ ³	87 HOW MUCH DID YOUR CLOSE RELATIVES (PARENTS, BROTHERS, SISTERS, ETC.) INFLUENCE YOUR DECISION TO MOVE HERE? A GREAT DEAL..... SOME..... NOT MUCH..... NONE.....	○ ¹ ○ ² ○ ³ ○ ⁴
86	HOW MUCH DID THE THOUGHT OF LEAVING YOUR CLOSE RELATIVES (PARENTS, IN-LAWS, BROTHERS, SISTERS, ETC.) WEIGH AGAINST YOUR DECISION TO MOVE HERE? A GREAT DEAL..... SOME..... NOT MUCH..... NONE.....	○ ¹ ○ ² ○ ³ ○ ⁴	88 GENERALLY, WERE THEY FOR OR AGAINST YOUR MOVING HERE? FOR..... AGAINST..... INDIFFERENT.....	○ ¹ ○ ² ○ ³

89 PLEASE RANK, IN ORDER OF DECREASING IMPORTANCE, WHAT YOU DISLIKE MOST ABOUT LIVING HERE

(UNIMPORTANT)



THE JOB.....	1	2	3	4	5	6	7	8	9	10	11	12	13 ¹
THE EMPLOYER.....	1	2	3	4	5	6	7	8	9	10	11	12	13 ²
CO-WORKERS.....	1	2	3	4	5	6	7	8	9	10	11	12	13 ³
PEOPLE IN THE COMMUNITY.....	1	2	3	4	5	6	7	8	9	10	11	12	13 ⁴
INADEQUATE RECREATION FACILITIES....	1	2	3	4	5	6	7	8	9	10	11	12	13 ⁵
INADEQUATE ENTERTAINMENT FACILITIES....	1	2	3	4	5	6	7	8	9	10	11	12	13 ⁶
POOR ACCESS TO MAJOR URBAN CENTERS.....	1	2	3	4	5	6	7	8	9	10	11	12	13 ⁷
POOR ACCOMMODATION.....	1	2	3	4	5	6	7	8	9	10	11	12	13 ⁸
INFERIOR SCHOOLS.....	1	2	3	4	5	6	7	8	9	10	11	12	13 ⁹
THE CLIMATE.....	1	2	3	4	5	6	7	8	9	10	11	12	13 ¹⁰
BEING AWAY FROM FAMILY/ CLOSE FRIENDS.....	1	2	3	4	5	6	7	8	9	10	11	12	13 ¹¹
LIVING IN A SMALL COMMUNITY.....	1	2	3	4	5	6	7	8	9	10	11	12	13 ¹²

90 HOW MUCH DID THE THOUGHT OF LEAVING CLOSE FRIENDS (INCLUDING FORMER CO-WORKERS) WEIGH AGAINST YOUR DECISION TO MOVE HERE?

92 HOW MUCH DOES THE SITUATION HERE (JOBS, WAGES, ETC.) DIFFER FROM THE INFORMATION YOU OBTAINED BEFORE MOVING?

- A GREAT DEAL.....○¹
- SOME.....○²
- NOT MUCH.....○³
- NONE.....○⁴

- A GREAT DEAL.....○¹
- SOME.....○²
- NOT MUCH.....○³
- NONE.....○⁴

91 HOW MUCH DOES MOVING TO A NEW TOWN/CITY MAKE YOU FEEL INSECURE?

- A GREAT DEAL.....○¹
- SOME.....○²
- NOT MUCH.....○³
- NONE.....○⁴

93 ROUGHLY, HOW LONG (WEEKS, MONTHS, YEARS, ETC.) DID YOU THINK ABOUT MOVING HERE BEFORE COMING TO A DECISION?

94 PLEASE RANK, IN ORDER OF DECREASING
IMPORTANCE, WHAT YOU LIKE MOST
ABOUT LIVING HERE

(UNIMPORTANT)



THE WAGES/SALARIES.....	1	2	3	4	5	6	7	8	9	10	11	12	13 ¹
THE JOB.....	1	2	3	4	5	6	7	8	9	10	11	12	13 ²
THE EMPLOYER.....	1	2	3	4	5	6	7	8	9	10	11	12	13 ³
CO-WORKERS.....	1	2	3	4	5	6	7	8	9	10	11	12	13 ⁴
PEOPLE IN THE COMMUNITY.....	1	2	3	4	5	6	7	8	9	10	11	12	13 ⁵
GOOD RECREATION FACILITIES.....	1	2	3	4	5	6	7	8	9	10	11	12	13 ⁶
GOOD ENTERTAINMENT FACILITIES.....	1	2	3	4	5	6	7	8	9	10	11	12	13 ⁷
GOOD ACCESS TO MAJOR URBAN CENTERS.....	1	2	3	4	5	6	7	8	9	10	11	12	13 ⁸
GOOD ACCOMMODATION.....	1	2	3	4	5	6	7	8	9	10	11	12	13 ⁹
GOOD SCHOOLS.....	1	2	3	4	5	6	7	8	9	10	11	12	13 ¹⁰
THE CLIMATE.....	1	2	3	4	5	6	7	8	9	10	11	12	13 ¹¹
LIVING IN A SMALL COMMUNITY.....	1	2	3	4	5	6	7	8	9	10	11	12	13 ¹²

95 HOW, IF AT ALL, WOULD YOU SAY THE REAL SITUATION HERE (WITH RESPECT TO JOBS, WAGES, LIFESTYLE, ETC.) DIFFERS FROM THE INFORMATION YOU OBTAINED BEFORE MOVING HERE?

- MUCH BETTER..... 1
- BETTER..... 2
- SAME..... 3
- WORSE..... 4
- MUCH WORSE..... 5

96 HOW WOULD YOU ASSESS THE LONG TERM ECONOMIC PROSPECTS OF THIS COMMUNITY?

- EXCELLENT..... 1
- GOOD..... 2
- FAIR..... 3
- POOR..... 4

97 FROM THE FOLLOWING ALTERNATIVES, WHICH WAS THE MOST IMPORTANT REASON FOR YOUR MOVING HERE?

- TO GET A JOB (ANY JOB)..... 1
- TO MAKE SOME QUICK MONEY.... 2
- FOR A BETTER PAYING JOB.... 3
- TRANSFERRED BY EMPLOYER.... 4
- FOR A MORE INTERESTING JOB.. 5
- TO SEE THIS PART OF CANADA.. 6
- WIFE/HUSBAND GOT A JOB HERE. 7
- TO WORK IN A SMALL COMMUNITY..... 8
- TO GET AWAY FROM FAMILY.... 9
- WIFE/HUSBAND WAS TRANSFERRED HERE..... 10
- OTHER (SPECIFY) _____

Please indicate, by circling the appropriate abbreviation, the extent to which you agree or disagree with the following statements.

KEY: SA = Strongly Agree; A = Agree; D = Disagree;
SD = Strongly Disagree

- 2.2.2. The Canadian news media are probably among the least biased in the world.....SA A D SD
- 1.1.1. My decision to move here was strongly influenced by certain close friends/relatives who were familiar with the situation here.....SA A D SD
- 1.3.1. Close friends/relatives who had already moved here made me realize what I was missing out on by not joining them.....SA A D SD
- 3.1.4. The 'grapevine' generated by trade and professional associations (including unions) is one of the best sources of information about what's going on in the industry.....SA A D SD
- 3.3.3. Membership in trade/professional associations with nation-wide connections gives me a good feeling of security when a move to a new job becomes necessary.....SA A D SD
- 1.2.2. When I need important advice or information, I can usually rely on close friends/relatives to be honest with me.....SA A D SD
- 1.2.4. I moved here largely because I believed the things my close friends/relatives told me about this area.....SA A D SD
- 2.1.4. The news media in the place I came from seemed to provide an accurate picture of what's going on in this country.....SA A D SD
- 3.3.4. Membership in trade/professional associations (including unions) is vital to job security these days.....SA A D SD

- 2.3.1. The news items and other programs on TV, radio, and in the press about opportunities here made me realize what I was missing out on.....SA A D SD
- 1.2.3. Having close friends and/or relatives nearby gives me a good feeling of security.....SA A D SD
- 3.3.2. Before coming to this community, I received a fair amount of information about the job from the company I now work for.....SA A D SD
- 3.2.2. Membership in trade or professional associations (including unions) is very influential to me in deciding whether job vacancies around the country are worth going after.....SA A D SD
- 2.2.4. The news media are a valuable source of information to me when I decide to look for a new job.....SA A D SD
- 2.2.1. My decision to move here was largely an attempt to cash in on the job opportunities and wages that the news media suggested were available here.....SA A D SD
- 3.3.1. I didn't realize what the opportunities really were here (in terms of wages, etc.) until I heard about the area through the work 'grapevine.'.....SA A D SD
- 1.2.1. Close friends/relatives are a good source of information when I'm looking for a new job.....SA A D SD
- 3.2.4. The employer who hired me produced some pretty convincing facts and figures about jobs and the life here when I was considering moving in search of a new job.....SA A D SD
- 2.2.3. One of the main reasons I moved here was because I relied on the information given out by the news media about this area.....SA A D SD

- 1.1.4. Close friends/relatives are a reliable source of help when I (or my family) get into difficulties.....SA A D SD
- 3.1.2. My decision to move here was based largely on the publicity and recruiting information I received from the company that hired me.....SA A D SD
- 2.3.3. It's easy to forget how much our lives are influenced by the news media these days.....SA A D SD
- 1.3.3. Having close friends/relatives already living in a town/city makes the decision to move there much easier.....SA A D SD
- 3.1.3. Belonging to a trade/professional association (including unions) has been very beneficial to my career.....SA A D SD
- 2.1.1. My decision to move here was strongly influenced by reports about jobs and wages in the news media (TV, radio, newspapers, etc.).....SA A D SD
- 2.3.4. I find that the mass media (TV, radio, newspapers, etc.) are increasingly influencing the way I organize my life these days.....SA A D SD
- 3.2.1. Information provided by the trade/ professional associations I belong to (including unions) is often very influential in deciding whether job vacancies around the country are worth going after.....SA A D SD
- 1.3.2. Close friends/relatives who had already moved here seemed to be doing so well I thought it would be a good idea to join them.....SA A D SD
- 1.3.4. Moving to a new community where I have no close friends/relatives usually makes me feel a little uneasy.....SA A D SD

- 3.1.1. My decision to move here was strongly influenced by information on jobs, wages and other other opportunities provided by the trade/professional associations (including unions)
I belong(ed) to.....SA A D SD
- 3.2.3. I moved here largely because I believed the information being passed along the 'grapevine' at work, about the job and wage opportunities in this area.....SA A D SD
- 2.1.2. News reports in the mass media (TV, radio, newspapers, etc.) were a very convincing source of information about jobs and the lifestyle in this region.....SA A D SD
- 1.1.3. Thinking about how some of my close friends/relatives might handle a problem often helps me decide what to do in a similar situation.....SA A D SD
- 2.3.2. One of the best ways to get some idea of how one is doing in terms of wages, living conditions, etc., compared to other people throughout the country is to keep in touch with the news media (TV, radio, newspapers, etc.).....SA A D SD
- 1.1.2. When moving to a new town or city, knowing whether close friends or relatives are there is just as important as finding a job.....SA A D SD
- 2.1.3. I automatically look to the news media in order to keep informed about what is going on in this country.....SA A D SD

Appendix B

Table B-1

Discriminant Analysis: Mass Media with 3-Occupational Group Split. Community Group 1.
(Grande Cache/Fox Creek).

Function	Eigen Value	% Variance	Canonical Correlation	After Function	Wilks Lambda	X ²	DF	Sig.
				0	.761	27.320	24	.289
1	.204	69.5	.411	1	.917	8.651	11	.654
2	.089	30.5	.287	-	-	-	-	-

N = 131

Table B-2

Discriminant Analysis: Mass Media with 3-Occupational Group Split. Community Group 2.
(Rainbow Lake/Swan Hills).

Function	Eigen Value	% Variance	Canonical Correlation	After Function	Wilks Lambda	X ²	DF	Sig.
				0	.618	43.889	24	.007
1	.454	80.5	.559	1	.900	9.576	11	.568
2	.110	19.5	.315	-	-	-	-	-

N = 120

Table B-3

Discriminant Analysis: Migrant Stock with 3-Occupational Group Split. Total Sample.

Function	Eigen Value	% Variance	Canonical Correlation	After Function	Wilks Lambda	χ^2	DF	Sig.
				0	.748	57.951	24	.000
1	.258	81	.453	1	.942	11.799	11	.378
2	.060	19	.239	-	-	-	-	-

N = 251

Table B-4

Discriminant Analysis: Employment Networks with 3-Occupational Group Split. Total Sample.

Function	Eigen Value	% Variance	Canonical Correlation	After Function	Wilks Lambda	χ^2	DF	Sig.
				0	.774	51.293	24	.001
1	.242	86	.442	1	.962	7.706	11	.379
2	.039	14	.194	-	-	-	-	-

N = 251

Table B-5

Discriminant Analysis: Mass Media. Classification Results with 3-Occupational Group Split.
Community Group 1 (Grande Cache/Fox Creek).

Actual Group	# Cases	Predicted Group Membership		
		Group 1	Group 2	Group 3
1 (unskilled/semi skilled)	62	47.1%	23.5%	29.4%
2 (skilled blue-collar)	40	33.3%	30.3%	36.4%
3 (skilled/professional white-collar)	30	16.0%	64.0%	20.0%

Summary Statistics: 47.71% of grouped cases correctly classified.

Table B-6

Discriminant Analysis: Mass Media. Classification Results with 3-Occupational Group Split.
Community Group 2 (Rainbow Lake/Swan Hills).

Actual Group	# Cases	Predicted Group Membership		
		Group 1	Group 2	Group 3
1 (unskilled/semi skilled)	52	62.8%	14.0%	23.3%
2 (skilled blue-collar)	43	27.8%	5.6%	66.7%
3 (skilled/professional white-collar)	25	33.3%	57.1%	9.5%

Summary Statistics: 63% of grouped cases correctly classified.

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